



RADIO TEST REPORT

FCC ID : MSQ-RTAX5C00
Equipment : ROG Rapture Tri-Band Gaming Router
Brand Name : ASUS
Model Name : GT-AX11000 Pro
Applicant : ASUSTeK COMPUTER INC.
1F., No. 15, Lide Rd., Beitou, Taipei City 112, Taiwan
Manufacturer(1) : Compal Networking(KunShan) CO., LTD
No.520,Nan Bang RD., Economic & Technical
Development Zone, KunShan,JiangSu,China
Manufacturer(2) : ARCADYAN TECHNOLOGY (VIETNAM) CO., LTD.
Land plot No. D4-5-6, Thang Long Industrial Park
(Vinh Phuc), Thien Ke Commune, Binh Xuyen
District, Vinh Phuc Province, Vietnam
Standard : 47 CFR FCC Part 15.247

The product was received on Feb. 15, 2022, and testing was started from Feb. 25, 2022 and completed on Apr. 15, 2022. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Hsinchu Laboratory, the test report shall not be reproduced except in full.

Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory

No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)



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Photographs of EUT v01



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.247(a)	DTS Bandwidth	PASS	-
3.3	15.247(b)	Maximum Conducted Output Power	PASS	-
3.4	15.247(e)	Power Spectral Density	PASS	-
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	-
3.6	15.247(d)	Emissions in Restricted Frequency Bands	PASS	-

Declaration of Conformity:

1. The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers. It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.
2. The measurement uncertainty please refer to report "Measurement Uncertainty".

Comments and Explanations:

1. The test configuration, test mode and test software were written in this test report are declared by the manufacturer.
2. The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen**Report Producer: Penny Kao**



1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
2400-2483.5	b, g, n (HT20), VHT20, ax (HEW20)	2412-2462	1-11 [11]
2400-2483.5	n (HT40), VHT40, ax (HEW40)	2422-2452	3-9 [7]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	4TX
2.4-2.4835GHz	802.11g	20	4TX
2.4-2.4835GHz	802.11n HT20	20	4TX
2.4-2.4835GHz	802.11n HT20-BF	20	4TX
2.4-2.4835GHz	VHT20	20	4TX
2.4-2.4835GHz	VHT20-BF	20	4TX
2.4-2.4835GHz	802.11ax HEW20	20	4TX
2.4-2.4835GHz	802.11ax HEW20-BF	20	4TX
2.4-2.4835GHz	802.11n HT40	40	4TX
2.4-2.4835GHz	802.11n HT40-BF	40	4TX
2.4-2.4835GHz	VHT40	40	4TX
2.4-2.4835GHz	VHT40-BF	40	4TX
2.4-2.4835GHz	802.11ax HEW40	40	4TX
2.4-2.4835GHz	802.11ax HEW40-BF	40	4TX

Note:

- ♦ 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- ♦ 11g, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ VHT20, VHT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ HEW20, HEW40 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ BWch is the nominal channel bandwidth.



1.1.2 Antenna Information

Ant.	Port			Brand	Model Name	Antenna Type	Connector	Gain (dBi)
	WLAN 2.4GHz	WLAN 5GHz UNII 1~2A	WLAN 5GHz UNII2C~4					
1	1	1	-	PSA	RFDPA181125IMLB902	Dipole	I-PEX	Note1
2	2	2	-	PSA	RFDPA181120IMLB902	Dipole	I-PEX	
3	3	3	-	PSA	RFDPA181105IMLB903	Dipole	I-PEX	
4	4	4	-	PSA	RFDPA181112IMLB902	Dipole	I-PEX	
5	-	-	1	PSA	RFDPA181118IM5B902	Dipole	I-PEX	
6	-	-	2	PSA	RFDPA181110IM5B902	Dipole	I-PEX	
7	-	-	3	PSA	RFDPA181116IM5B902	Dipole	I-PEX	
8	-	-	4	PSA	RFDPA181121IM5B902	Dipole	I-PEX	

Note1:

<Antenna gain>

Ant.	Port			Gain(dBi)					
	WLAN 2.4GHz	WLAN 5GHz UNII 1~2A	WLAN 5GHz UNII2C~4	WLAN 2.4GHz	WLAN 5GHz				
					UNII 1	UNII 2A	UNII 2C	UNII 3	UNII 4
1	1	1	-	2.85	2.75	3.44	-	-	-
2	2	2	-	1.57	2.00	1.89	-	-	-
3	3	3	-	3.93	2.48	2.45	-	-	-
4	4	4	-	1.86	3.61	3.56	-	-	-
5	-	-	1	-	-	-	3.67	3.02	3.98
6	-	-	2	-	-	-	2.68	2.31	1.93
7	-	-	3	-	-	-	2.74	1.84	1.99
8	-	-	4	-	-	-	3.61	2.51	3.44

<Directional gain>

Item	Directional Gain (dBi)					
	WLAN 2.4GHz	WLAN 5GHz UNII 1	WLAN 5GHz UNII 2A	WLAN 5GHz UNII 2C	WLAN 5GHz UNII 3	WLAN 5GHz UNII 4
4T1S	7.6	6.89	6.99	6.61	5.94	6.25
4T2S	4.6	-	-	-	-	-

Note2: The above information (excepting antenna gain) was declared by manufacturer.

Note3: The directional gain is measured which follows the procedure of KDB 662911 D03. The antenna report is provided in the operational description for this application.

Note4: The EUT has eight antennas.

For 2.4GHz function:

For IEEE 802.11 b/g/n/VHT/ax mode (4TX/4RX)

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

For 5GHz function:

For IEEE 802.11a/n/ac/ax mode (4TX/4RX)

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.



1.1.3 Mode Test Duty Cycle

Non-beamforming mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.952	0.21	12.425m	100
802.11g	0.948	0.23	2.068m	1k

Beamforming mode:

4T1S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20-BF	0.974	0.11	2.928m	1k
802.11ax HEW40-BF	0.974	0.11	4.36m	300

4T2S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20-BF	0.929	0.32	4.366m	300

Note:

- ◆ DC is Duty Cycle.
- ◆ DCF is Duty Cycle Factor.

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter			
Beamforming Function	<input checked="" type="checkbox"/> With beamforming	<input type="checkbox"/> Without beamforming		
	The product has beamforming function for 11n/VHT/ax in 2.4GHz and 11n/ac/ax in 5GHz.			
Function	<input checked="" type="checkbox"/> Point-to-multipoint	<input type="checkbox"/> Point-to-point		
Test Software Version	Non-beamforming mode: Mtool 3.2.1.4 Beamforming mode: LanTest20(version 2.0.0.2)			

Note: The above information was declared by manufacturer.

1.1.5 Table for EUT supports functions

Function	Support Type
AP Router	Master
Bridge	Slave without radar detection
Repeater	Master
Mesh	Master

Note 1: After evaluating, AP Router was selected to test and record in the report.

Note 2: The above information was declared by manufacturer.



1.2 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ◆ 47 CFR FCC Part 15.247
- ◆ ANSI C63.10-2013

The following reference test guidance is not within the scope of accreditation of TAF.

- ◆ FCC KDB 558074 D01 v05r02
- ◆ FCC KDB 662911 D03 v01
- ◆ FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

Testing Location Information	
Test Lab. : Sporton International Inc. Hsinchu Laboratory	
Hsinchu (TAF: 3787)	ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.) TEL: 886-3-656-9065 FAX: 886-3-656-9085 Test site Designation No. TW3787 with FCC. Conformity Assessment Body Identifier (CABID) TW3787 with ISED.

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH03-CB	Serway Lee	23.6-24.3 / 63-65	Mar. 24, 2022~ Apr. 12, 2022
Radiated (above 1GHz)	03CH06-CB	Stim Sung	24.5-25.6 / 56-59	Feb. 25, 2022~ Apr. 15, 2022
Radiated (Below 1GHz and Radiated Emission Co-location)	03CH05-CB	Stim Sung	23.8-24.9 / 55-58	Feb. 25, 2022~ Apr. 15, 2022
AC Conduction	CO01-CB	Joe Chu	20~22 / 60~62	Mar. 31, 2022~ Apr. 01, 2022



1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	4.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.5 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	2.5 dB	Confidence levels of 95%
Output Power Measurement	1.3 dB	Confidence levels of 95%
Power Density Measurement	2.5 dB	Confidence levels of 95%
Bandwidth Measurement	0.9%	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

Non-beamforming mode:

Mode
802.11b_Nss1,(1Mbps)_4TX
2412MHz
2417MHz
2437MHz
2462MHz
802.11g_Nss1,(6Mbps)_4TX
2412MHz
2417MHz
2437MHz
2462MHz

Beamforming mode:

4T1S

Mode
802.11ax HEW20-BF_Nss1,(MCS0)_4TX
2412MHz
2417MHz
2437MHz
2457MHz
2462MHz
802.11ax HEW40-BF_Nss1,(MCS0)_4TX
2422MHz
2437MHz
2452MHz

4T2S

Mode
802.11ax HEW20-BF_Nss2,(MCS0)_4TX
2412MHz
2417MHz
2437MHz
2457MHz
2462MHz

Note 1:Evaluated HEW20/HEW40 mode only due to the similar modulation.
 The power setting of HT20/HT40/VHT20/VHT40 mode are the same or lower than HEW20/HEW40.
 Note 2:The EUT supports non-beamforming and beamforming modes, after evaluating, the beamforming mode has been selected to execute all tests.



2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
Operating Mode	Normal Link
1	EUT + Adapter 1
2	EUT + Adapter 3
3	EUT + Adapter 4
For operating mode 1 is the worst case and it was record in this test report.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
	The EUT was performed at X axis, Y axis and Z axis. EUT in Z axis has been evaluated to be the worst case at Emissions in Restricted Frequency Bands <Above 1GHz>; thus, the measurement will follow this same test configuration.
1	EUT in Z axis + Adapter 1_2.4GHz
2	EUT in Z axis + Adapter 3_2.4GHz
3	EUT in Z axis + Adapter 4_2.4GHz
Mode 2 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4~5 will follow this same test mode.	
4	EUT in Z axis + Adapter 3_5GHz Low Band
5	EUT in Z axis + Adapter 3_5GHz High Band
For operating mode 4 is the worst case and it was record in this test report.	



Operating Mode > 1GHz	CTX
	The EUT was performed at X axis, Y axis and Z axis position. The worst case was found at Z axis, thus the measurement will follow this same test configuration.
1	EUT in Z axis

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link
	The EUT was performed at X axis, Y axis and Z axis. EUT in Z axis has been evaluated to be the worst case at Emissions in Restricted Frequency Bands <Above 1GHz>; thus, the measurement will follow this same test configuration.
1	EUT in Z axis_WLAN 2.4GHz + WLAN 5GHz Low Band
Refer to Appendix G for Radiated Emission Co-location.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz + WLAN 5GHz Low Band + WLAN 5GHz High Band
Refer to Sporton Test Report No.: FA221010 for Co-location RF Exposure Evaluation.	

2.3 EUT Operation during Test

For CTX Mode:
 non-beamforming mode:
 The EUT was programmed to be in continuously transmitting mode.

beamforming mode:
 For Conducted Mode:
 The EUT was programmed to be in continuously transmitting mode.

For Radiated Mode:
 During the test, the following programs under WIN 7 were executed.
 The program was executed as follows:

1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under DOS.
3. Executed "Lantest.exe" to link with the remote workstation to transmit and receive packet by WLAN AP and transmit duty cycle no less than 98%.

For Normal Link Mode:
 During the test, the EUT operation to normal function.



2.4 Accessories

Accessories				
Equipment Name	Brand Name	Model Name	Rating	Remark
Adapter 1	AcBel	ADD011	INPUT: 100-240V~1.7A, 50-60Hz OUTPUT: +19.5V, 3.33A, 65.0W MAX	With the DC cable: Non-shielded, 1.5m
Adapter 2	AcBel	ADD011	INPUT: 100-240V~1.7A, 50-60Hz OUTPUT: +19.5V, 3.33A, 65.0W MAX	With the DC cable: Non-shielded, 1.5m
Adapter 3	DELTA	ADP-65GD D	INPUT: AC100-240V~50-60Hz, 1.5A OUTPUT: +19.0V, 3.42A, 65.0W	With the DC cable: Non-shielded, 1.5m
Adapter 4	DELTA	ADP-65DE B	INPUT: 100-240V~1.5A, 50-60Hz OUTPUT: 19.0V, 3.42A, 65.0W	With the DC cable: Non-shielded, 1.5m
Adapter 5	DELTA	ADP-65DE B	INPUT: 100-240V~1.5A, 50-60Hz OUTPUT: 19.0V, 3.42A, 65.0W	With the DC cable: Non-shielded, 1.5m
Others				
RJ-45 cable*1: Shielded, 1.5m Power cord*5: Non-shielded, 0.8m				

Note1: Adapter 1 & Adapter 2 and Adapter 4 & Adapter 5 are identical except for the S/N; Therefore, Adapter 1 and Adapter 4 were selected to test and recorded in this report.

Note2: Refer to photographs of EUT for the detail information of difference between Adapter 1 & Adapter 2 and Adapter 4 & Adapter 5.

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	HDD3.0	Transcend	TS1TSJ25A3K	N/A
B	LAN1 NB	DELL	E6430	N/A
C	LAN4 NB	DELL	E6430	N/A
D	2.4G NB	DELL	E6430	N/A
E	5G-L NB	DELL	E6430	N/A
F	2.5G WAN NB	DELL	E6430	N/A
G	10G LAN PC	DELL	T3400	N/A
H	5G-H NB	DELL	E6430	N/A
I	HDD3.0	Transcend	TS1TSJ25A3K	N/A



For Radiated below 1GHz and Radiated above 1GHz non-beamforming mode:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A

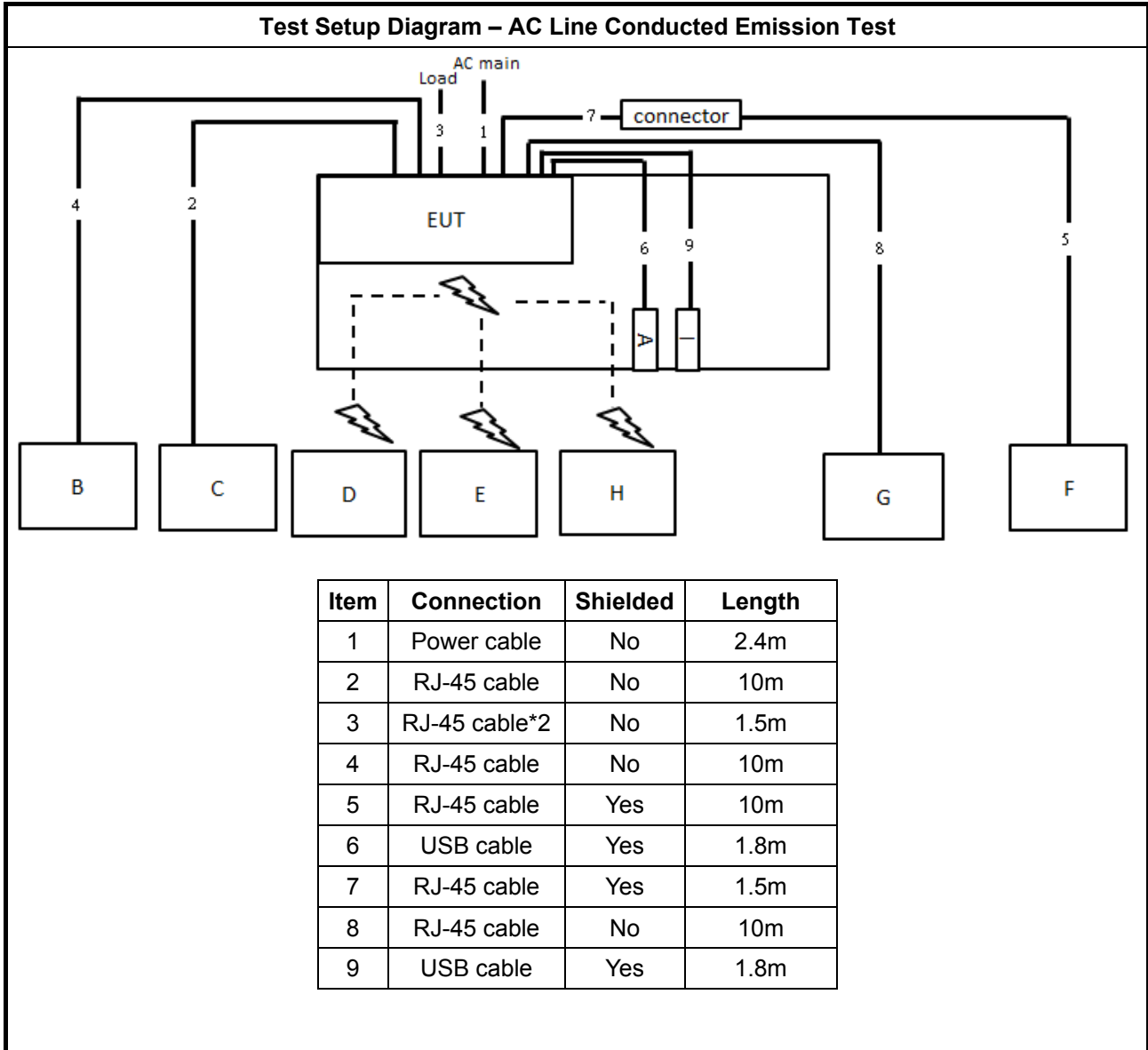
For Radiated above 1GHz beamforming mode:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	Notebook	DELL	E4300	N/A
C	WLAN AP	ASUS	GT-AX11000 Pro	MSQ-RTAX5C00

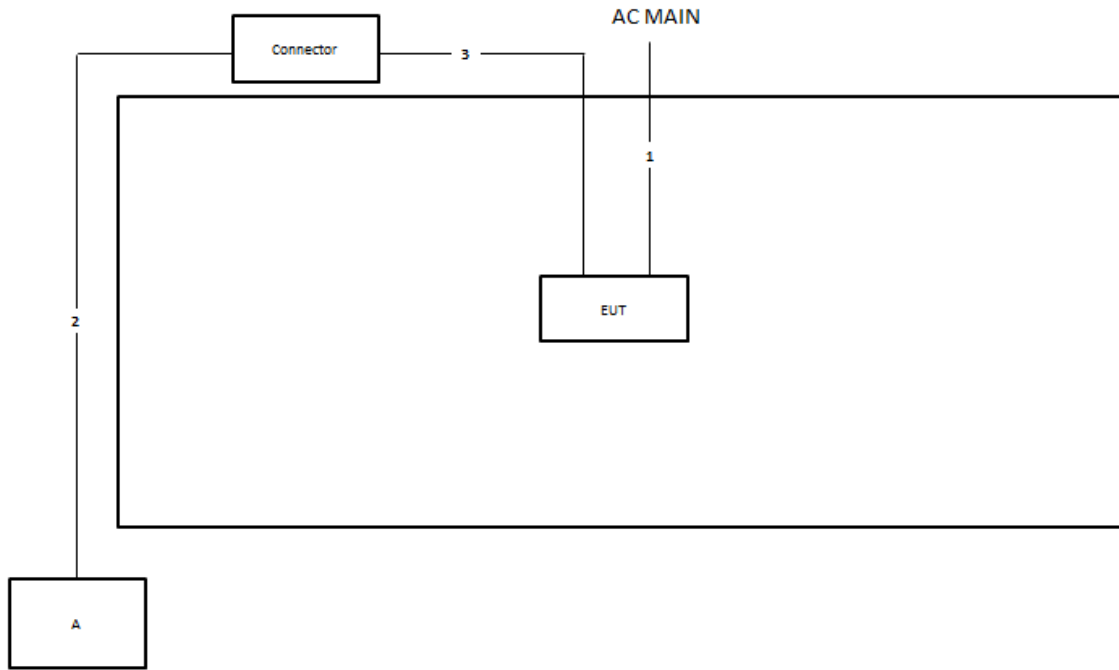
For RF Conducted:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A

2.6 Test Setup Diagram

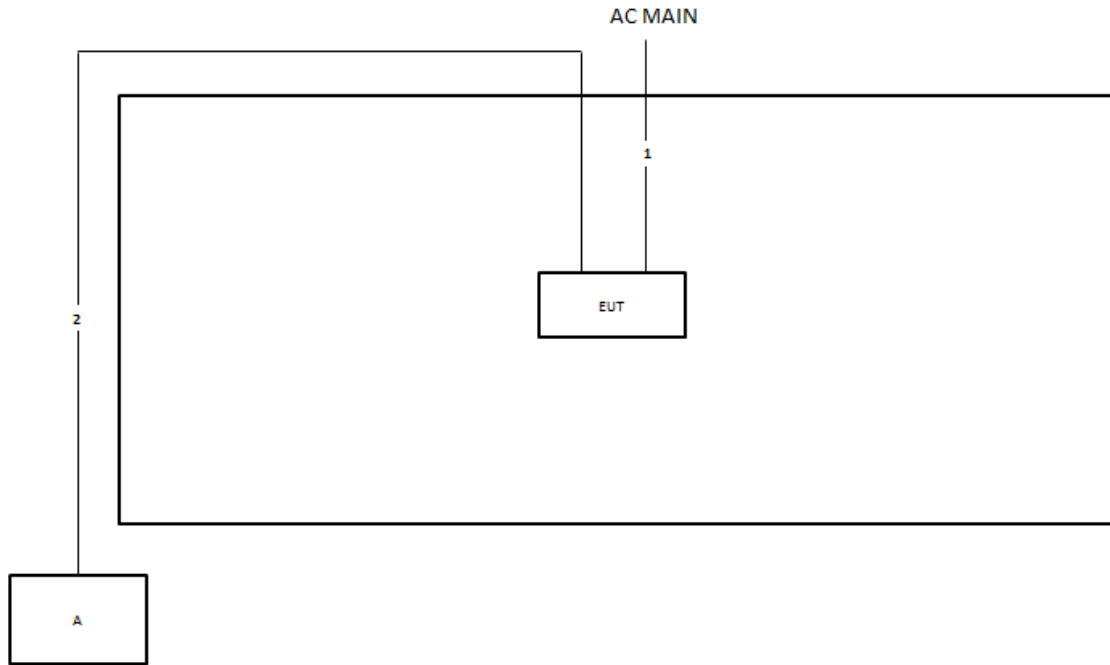


Test Setup Diagram - Radiated Test < 1GHz



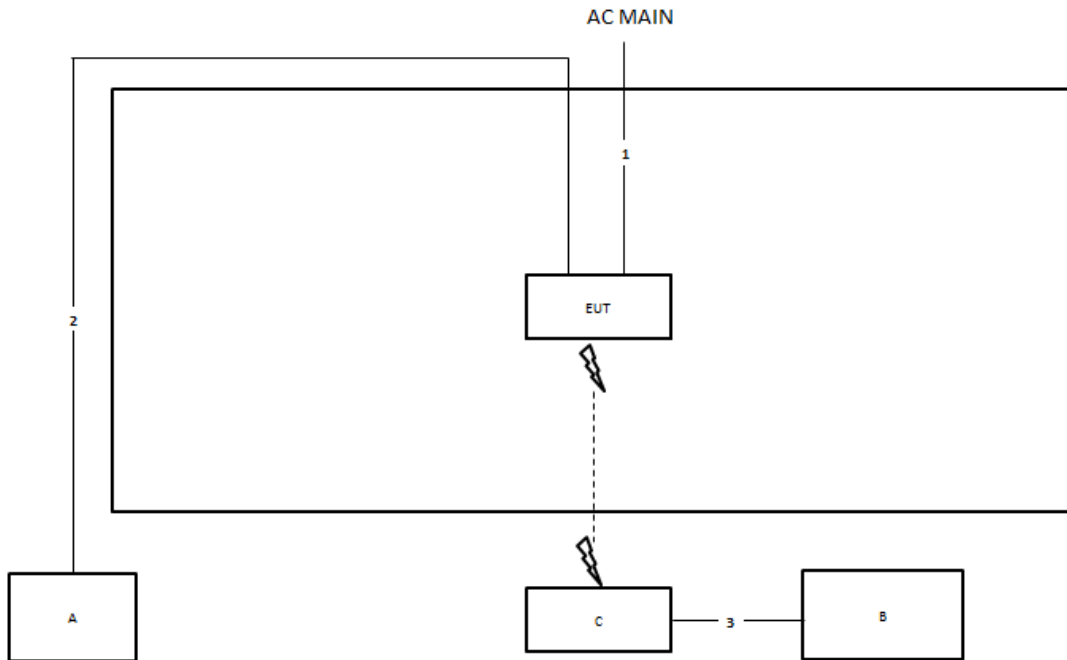
Item	Connection	Shielded	Length
1	Power cable	No	2.4m
2	RJ-45 cable	No	10m
3	RJ-45 cable	Yes	1.5m

**Test Setup Diagram - Radiated Test > 1GHz
Non-beamforming mode**



Item	Connection	Shielded	Length
1	Power cable	No	2.4m
2	RJ-45 cable	No	10m

**Test Setup Diagram - Radiated Test > 1GHz
Beamforming mode**



Item	Connection	Shielded	Length
1	Power cable	No	2.4m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	1.5m



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

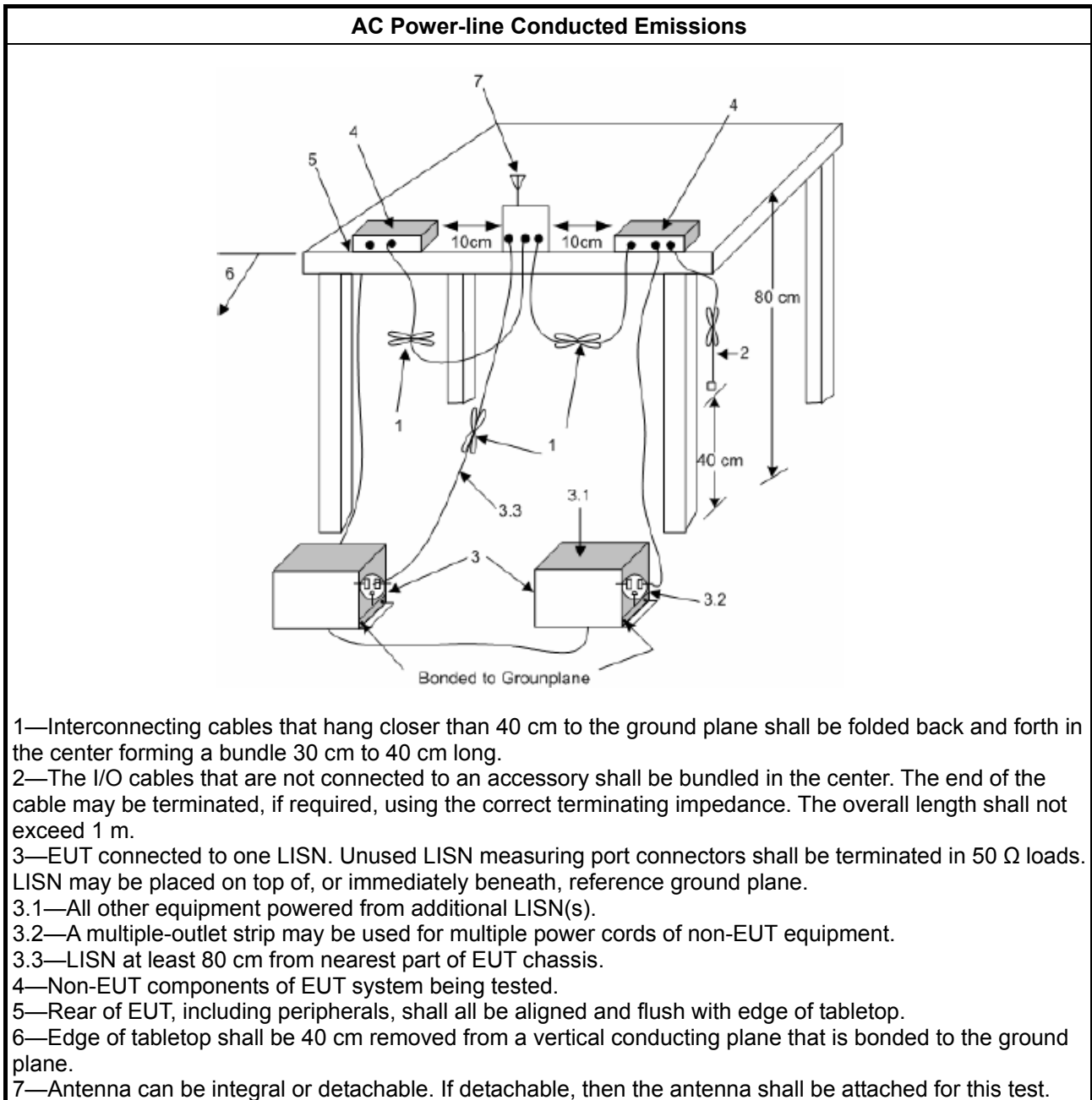
3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

Test Method
<input checked="" type="checkbox"/> Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup



3.1.5 Measurement Results Calculation

The measured Level is calculated using:

- a. Corrected Reading: LISN Factor (LISN) + Attenuator (AT/AUX) + Cable Loss (CL) + Read Level (Raw) = Level
- b. Margin = -Limit + Level

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit
Systems using digital modulation techniques:
<ul style="list-style-type: none"> ▪ 6 dB bandwidth \geq 500 kHz.

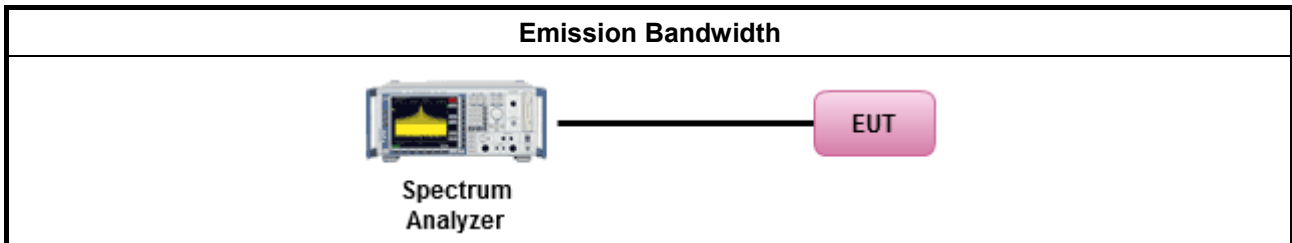
3.2.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

Test Method
<ul style="list-style-type: none"> ▪ For the emission bandwidth shall be measured using one of the options below:
<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.1 Option 1 for 6 dB bandwidth measurement.
<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.2 Option 2 for 6 dB bandwidth measurement.
<input type="checkbox"/> Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B



3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
	<ul style="list-style-type: none">▪ If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	<ul style="list-style-type: none">▪ Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	<ul style="list-style-type: none">▪ Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none">▪ Smart antenna system (SAS):
	<ul style="list-style-type: none">- Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none">- Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none">- Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dB dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

3.3.2 Measuring Instruments

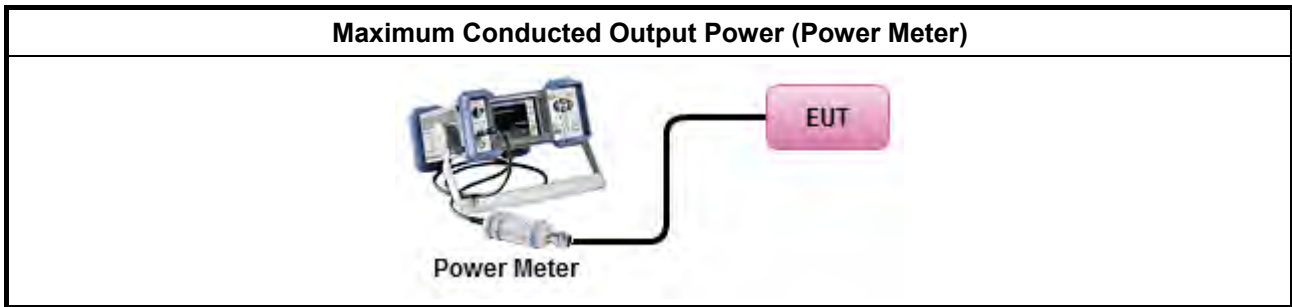
Refer a test equipment and calibration data table in this test report.



3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ Maximum Peak Conducted Output Power 	
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.1.1 & C63.10 clause 11.9.1.1 (RBW ≥ EBW method).
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.1.3 & C63.10 clause 11.9.1.3 (peak power meter).
<ul style="list-style-type: none"> ▪ Maximum Conducted Output Power 	
[duty cycle ≥ 98% or external video / power trigger]	
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.2 Method AVGSA-1.
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.3 Method AVGSA-1A. (alternative)
duty cycle < 98% and average over on/off periods with duty factor	
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.4 Method AVGSA-2.
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.5 Method AVGSA-2A (alternative)
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.6 Method AVGSA-3
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.7 Method AVGSA-3A (alternative)
Measurement using a power meter (PM)	
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.1 Method AVGPM (using an RF average power meter).
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.2 Method AVGPM-G (using an gate RF average power meter).
<ul style="list-style-type: none"> ▪ For conducted measurement. 	
	<ul style="list-style-type: none"> ▪ If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	<ul style="list-style-type: none"> ▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C



3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit
<ul style="list-style-type: none"> Power Spectral Density (PSD) \leq 8 dBm/3kHz

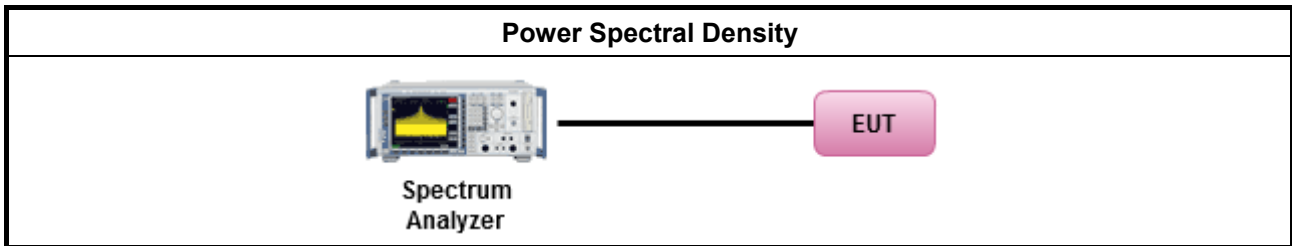
3.4.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method			
<ul style="list-style-type: none"> Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option). 			
<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10 Method Max. PSD.			
<ul style="list-style-type: none"> For conducted measurement. <ul style="list-style-type: none"> If The EUT supports multiple transmit chains using options given below: <table border="1"> <tbody> <tr> <td> <input checked="" type="checkbox"/> Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace. </td> </tr> <tr> <td> <input type="checkbox"/> Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits, </td> </tr> <tr> <td> <input type="checkbox"/> Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit. </td> </tr> </tbody> </table> 	<input checked="" type="checkbox"/> Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.	<input type="checkbox"/> Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,	<input type="checkbox"/> Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
<input checked="" type="checkbox"/> Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.			
<input type="checkbox"/> Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,			
<input type="checkbox"/> Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.			

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (dBc)
Peak output power procedure	20
Average output power procedure	30

Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak PSD level.

Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average PSD level.

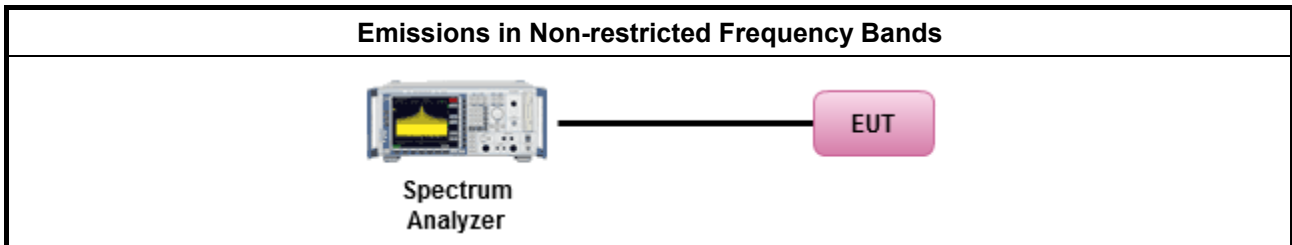
3.5.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method
<ul style="list-style-type: none"> Refer as FCC KDB 558074, clause 8.5 for unwanted emissions into non-restricted bands.

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E



3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

Restricted Band Emissions Limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.

3.6.2 Measuring Instruments

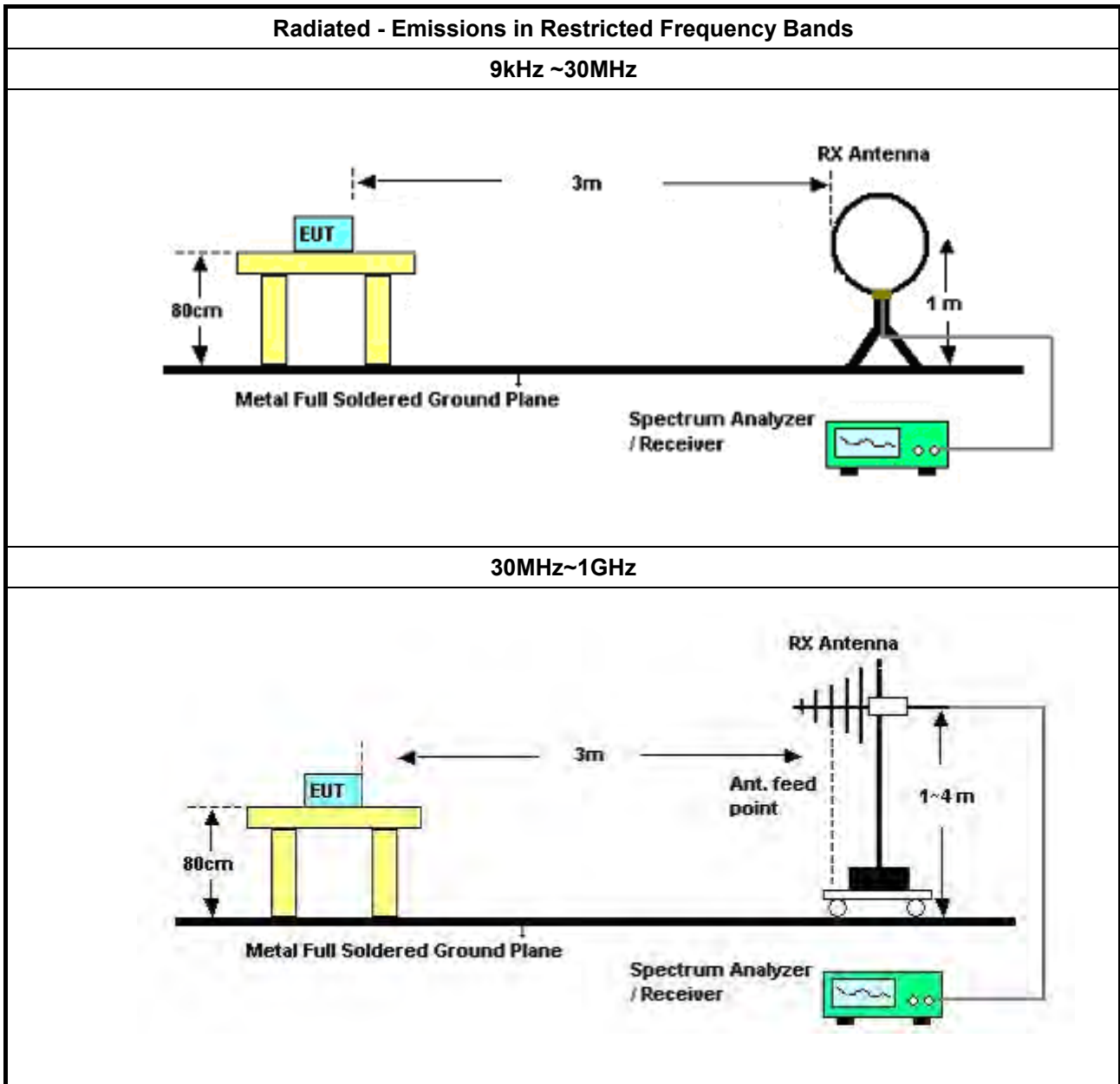
Refer a test equipment and calibration data table in this test report.

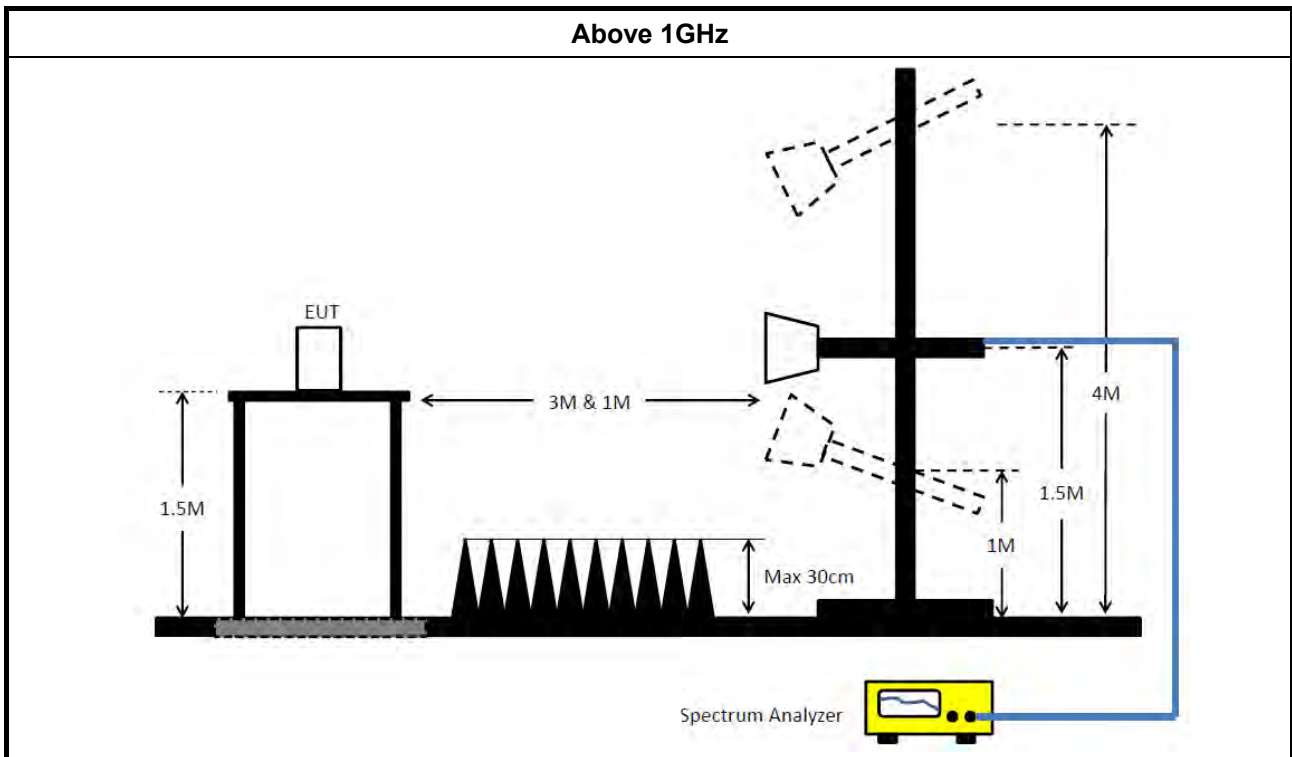


3.6.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ The average emission levels shall be measured in [duty cycle \geq 98 or duty factor]. 	
<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band. 	
<ul style="list-style-type: none"> ▪ For the transmitter unwanted emissions shall be measured using following options below: 	
	<ul style="list-style-type: none"> ▪ Refer as FCC KDB 558074, clause 8.6 for unwanted emissions into restricted bands.
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.1(trace averaging for duty cycle \geq 98%).
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.2(trace averaging + duty factor).
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.3(Reduced VBW \geq 1/T).
	<input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW \geq 1/T, where T is pulse time.
	<input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.4 measurement procedure peak limit.
<ul style="list-style-type: none"> ▪ For the transmitter band-edge emissions shall be measured using following options below: 	
	<ul style="list-style-type: none"> ▪ Refer as FCC KDB 558074 clause 8.7 & C63.10 clause 11.13.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.
	<ul style="list-style-type: none"> ▪ Refer as FCC KDB 558074, clause 8.7 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.
	<ul style="list-style-type: none"> ▪ Refer as FCC KDB 558074, clause 8.7 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
	<ul style="list-style-type: none"> ▪ For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB
	<ul style="list-style-type: none"> ▪ For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.

3.6.4 Test Setup





3.6.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna factor (AF) + Cable loss (CL) + Read level (Raw) - Preamp factor (PA)(if applicable) = Level.

3.6.6 Emissions in Restricted Frequency Bands (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.

All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10th harmonic or 40 GHz, whichever is appropriate.

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Feb. 22, 2022	Feb. 21, 2023	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Feb. 09, 2022	Feb. 08, 2023	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127650	9kHz ~ 30MHz	Jan. 07, 2022	Jan. 06, 2023	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 10, 2022	Feb. 09, 2023	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 19, 2021	May 18, 2022	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 14, 2021	Apr. 13, 2022	Radiation (03CH05-CB)
Loop Antenna	Teseq	HLA 6120	31244	9kHz - 30 MHz	Mar. 18, 2022	Mar. 17, 2023	Radiation (03CH05-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 09, 2021	Aug. 08, 2022	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH05-CB	1GHz ~18GHz 3m	Nov. 07, 2021	Nov. 06, 2022	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMC I	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 26, 2021	Mar. 25, 2022	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMC I	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 25, 2022	Mar. 24, 2023	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120 D-1291	1GHz~18GHz	Oct. 14, 2021	Oct. 13, 2022	Radiation (03CH05-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	Apr. 27, 2021	Apr. 26, 2022	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC12630SE	980287	1GHz ~ 26.5GHz	Jul. 02, 2021	Jul. 01, 2022	Radiation (03CH05-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH05-CB)
Signal Analyzer	R&S	FSV40	101903	9kHz ~ 40GHz	Mar. 22, 2021	Mar. 21, 2022	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Mar. 14, 2022	Mar. 13, 2023	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 21, 2021	Jun. 20, 2022	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Oct. 13, 2021	Oct. 12, 2022	Radiation (03CH05-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-28	1GHz~18GHz	Oct. 13, 2021	Oct. 12, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-04+28	1GHz~18GHz	Oct. 13, 2021	Oct. 12, 2022	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH06-CB	1GHz ~18GHz 3m	Oct. 01, 2021	Sep. 30, 2022	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120D-1292	1GHz~18GHz	Aug. 04, 2021	Aug. 03, 2022	Radiation (03CH06-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	May 06, 2021	May 05, 2022	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Dec. 24, 2021	Dec. 23, 2022	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-67	1GHz~18GHz	Feb. 24, 2022	Feb. 23, 2023	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-05+67	1GHz~18GHz	Feb. 24, 2022	Feb. 23, 2023	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH06-CB)
Test Software	Audix	E3	6.120210m	-	N.C.R.	N.C.R.	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Jan. 07, 2022	Jan. 06, 2023	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1726195	300MHz~40GHz	Aug. 22, 2021	Aug. 21, 2022	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz	Aug. 22, 2021	Aug. 21, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-11	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-12	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-13	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-15	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
Switch	SPTCB	SP-SWI	SWI-03	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P1	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P2	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P3	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P4	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P5	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH03-CB)

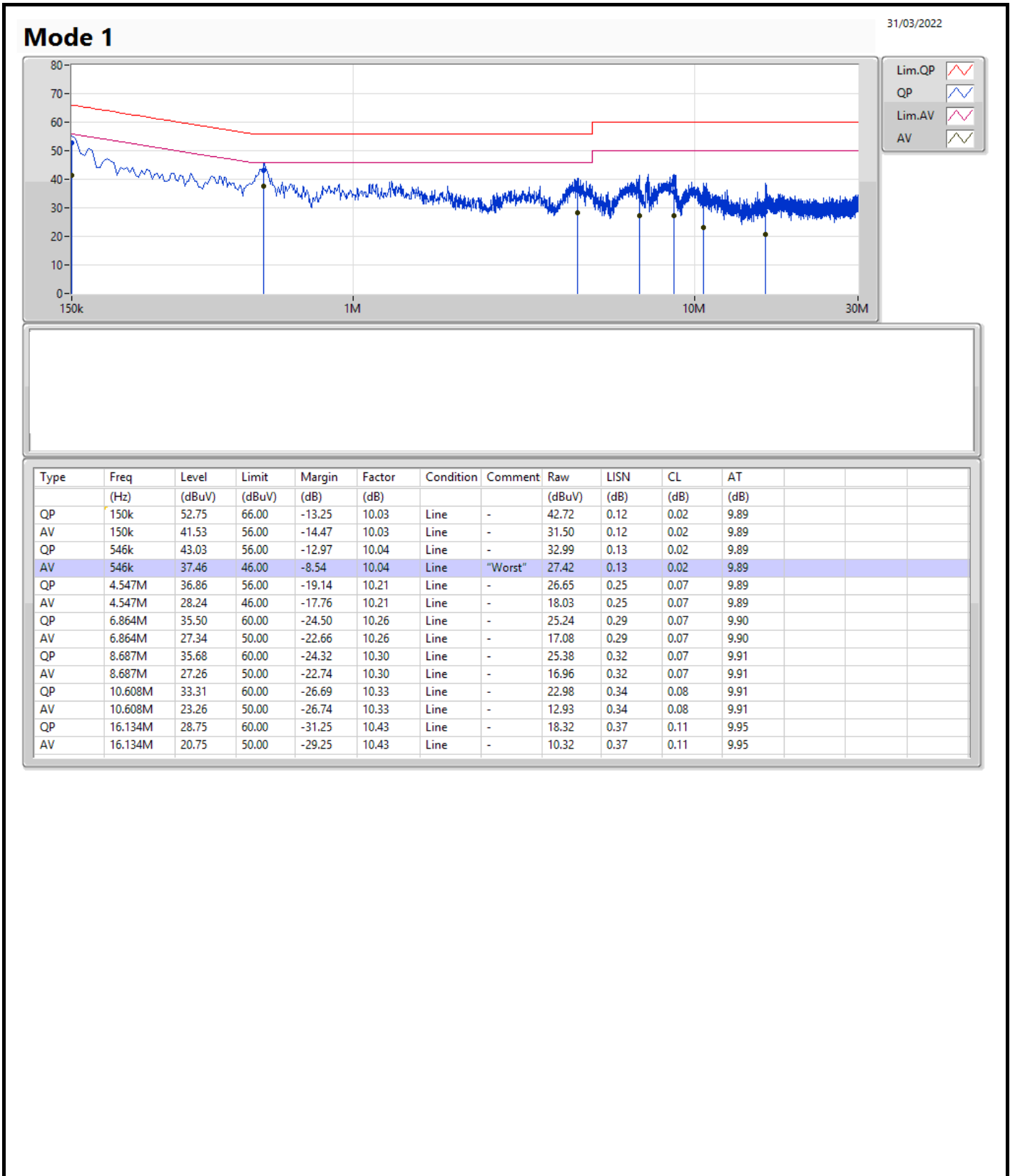
Note: Calibration Interval of instruments listed above is one year.

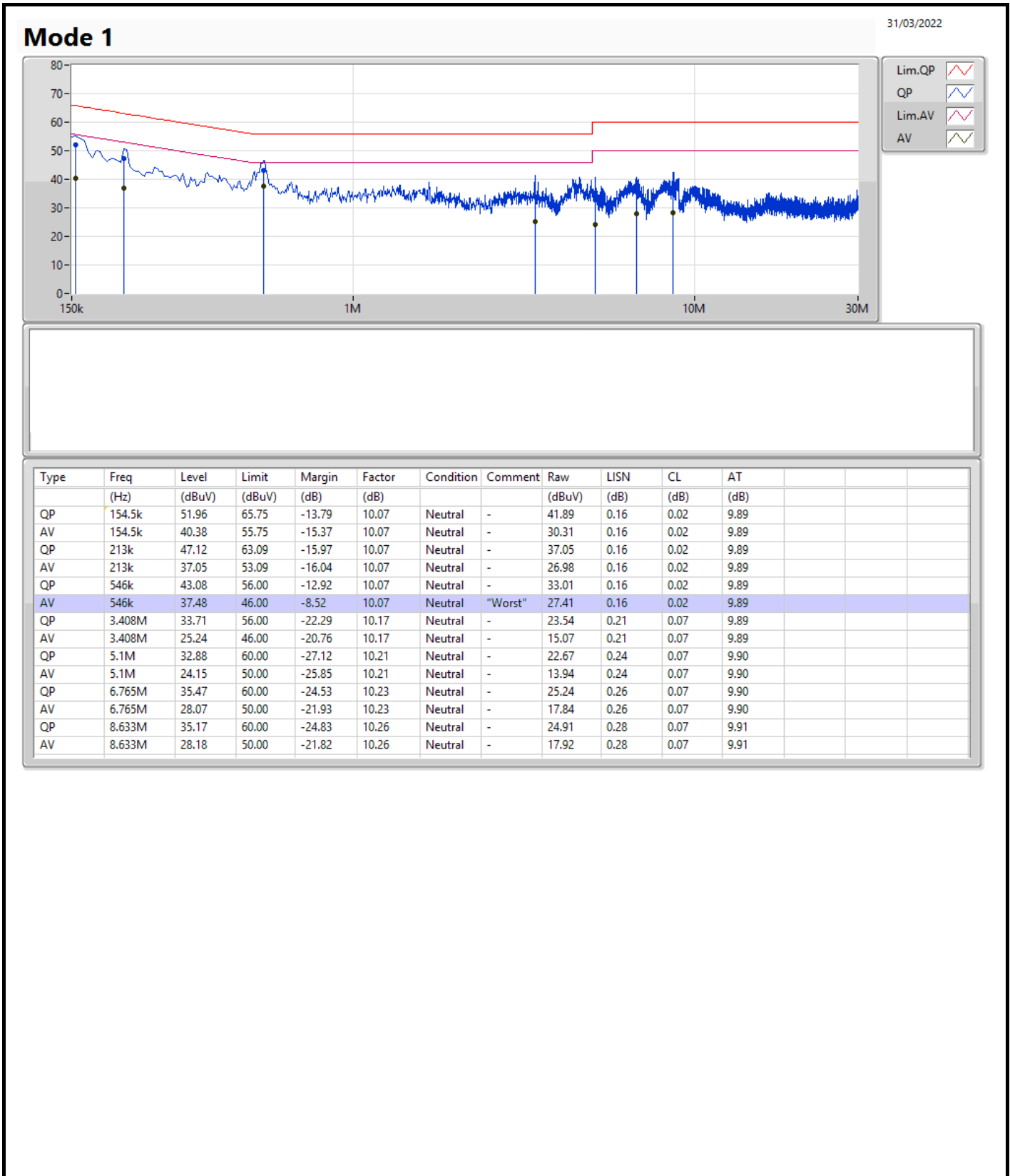
NCR means Non-Calibration required.



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	546k	37.48	46.00	-8.52	Neutral







Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_4TX	7.525M	10.445M	10M4G1D	6.975M	10.32M
802.11g_Nss1,(6Mbps)_4TX	16.35M	16.992M	17M0D1D	16.275M	16.717M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth



Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	7.05M	10.37M	7M	10.32M	7.525M	10.37M	7.05M	10.37M
2437MHz	Pass	500k	7.05M	10.37M	7M	10.345M	7.05M	10.37M	7.025M	10.42M
2462MHz	Pass	500k	6.975M	10.345M	7.025M	10.32M	7.05M	10.345M	7.025M	10.445M
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	16.3M	16.867M	16.325M	16.842M	16.3M	16.842M	16.35M	16.867M
2437MHz	Pass	500k	16.325M	16.792M	16.325M	16.742M	16.325M	16.717M	16.35M	16.767M
2462MHz	Pass	500k	16.325M	16.942M	16.35M	16.992M	16.275M	16.817M	16.325M	16.942M

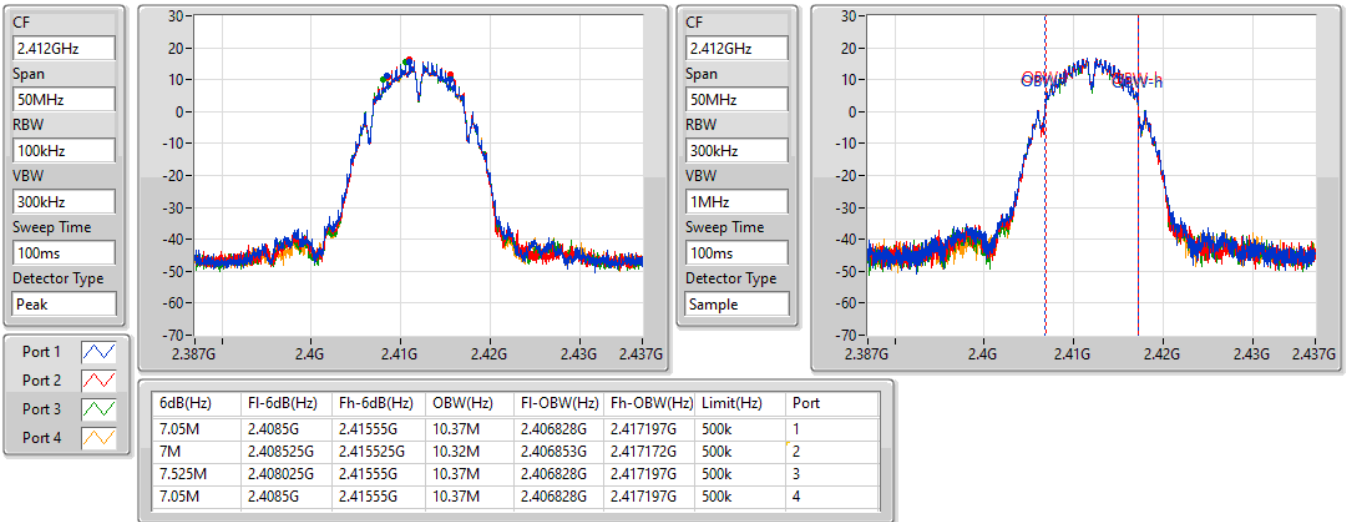
Port X-N dB = Port X 6dB down bandwidth;
 Port X-OBW = Port X 99% occupied bandwidth

802.11b_Nss1,(1Mbps)_4TX

EBW

2412MHz

24/03/2022

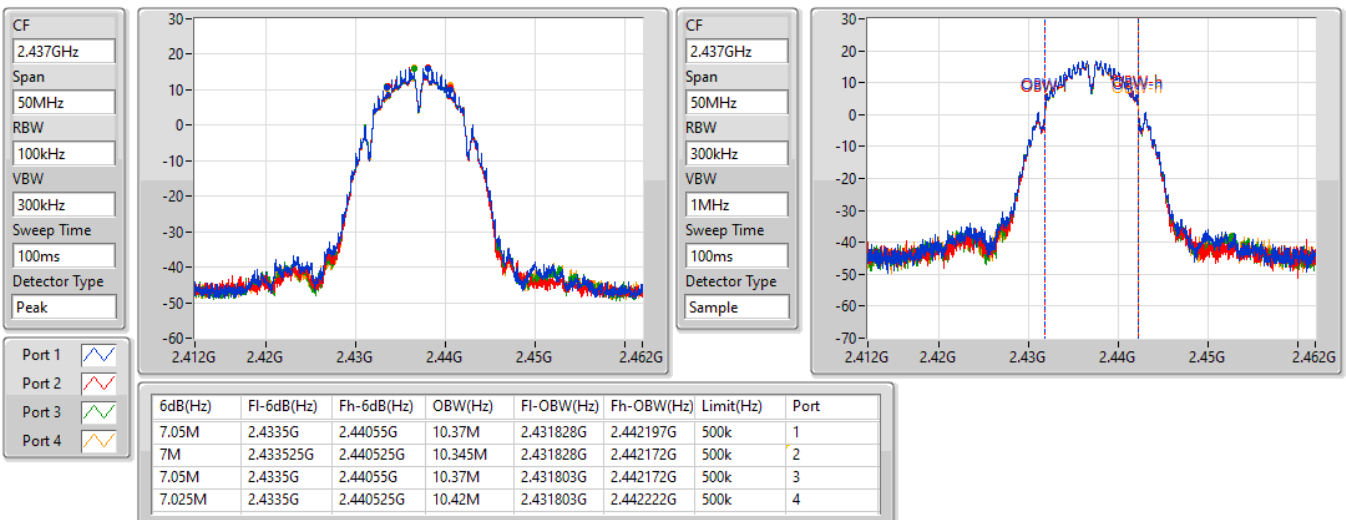


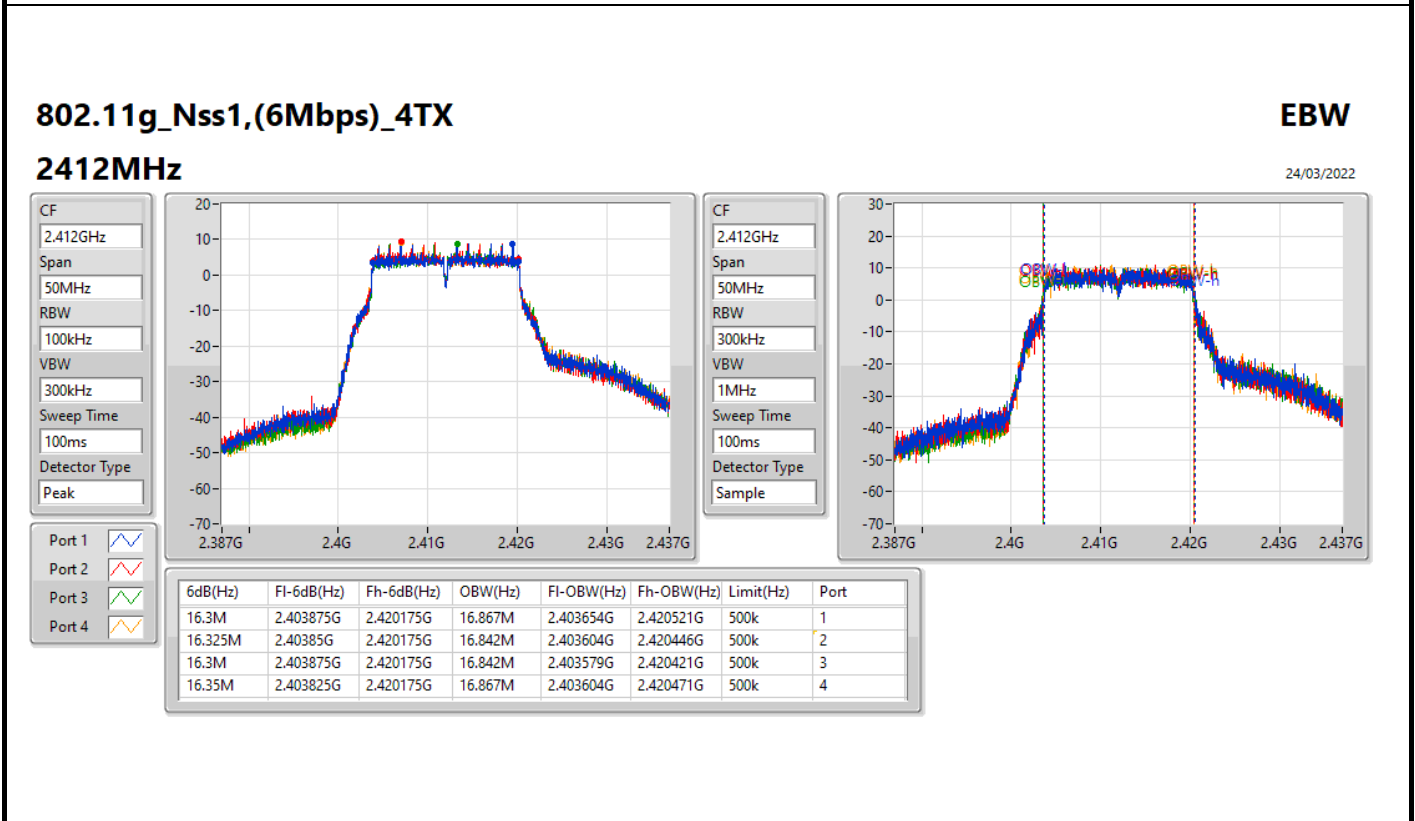
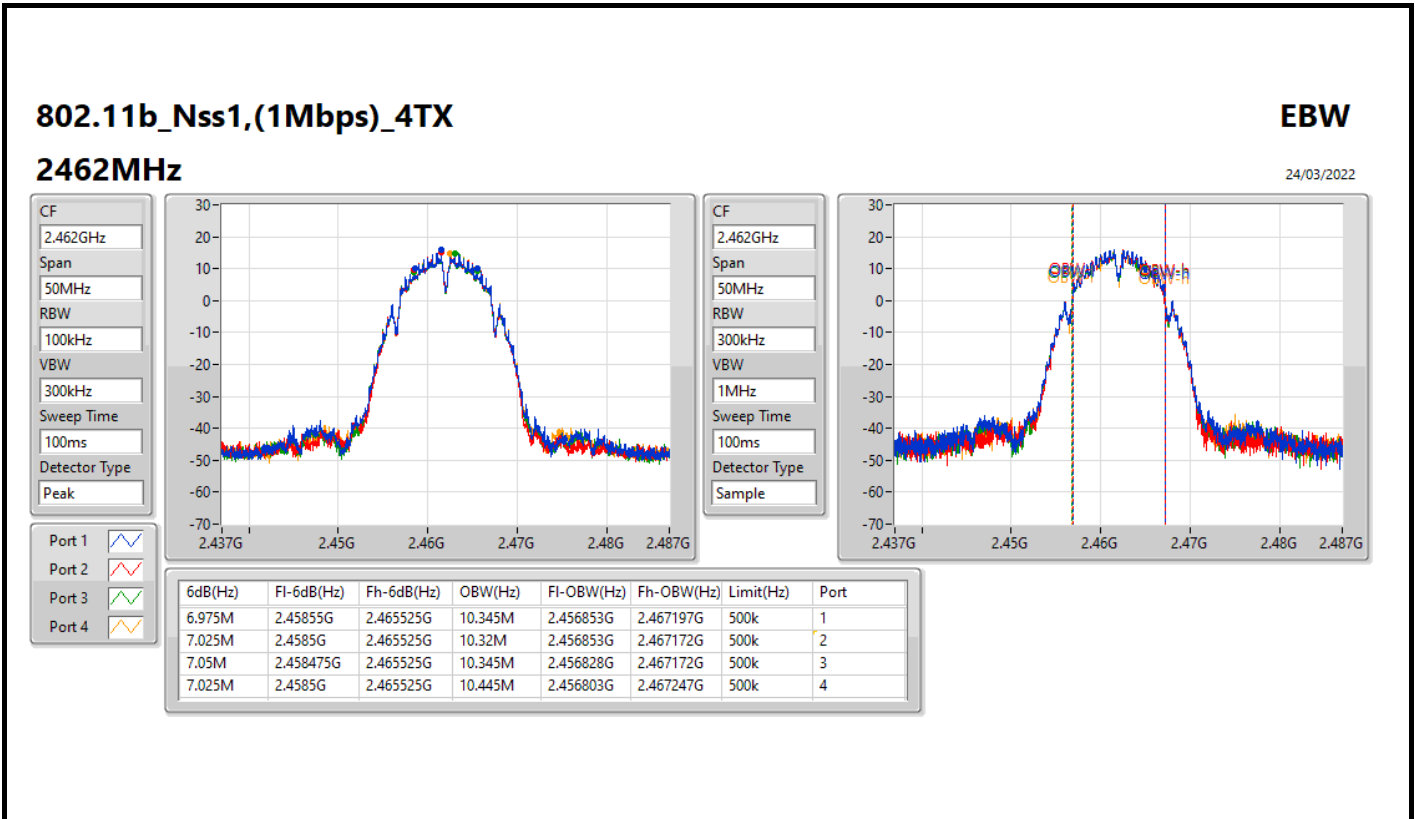
802.11b_Nss1,(1Mbps)_4TX

EBW

2437MHz

24/03/2022





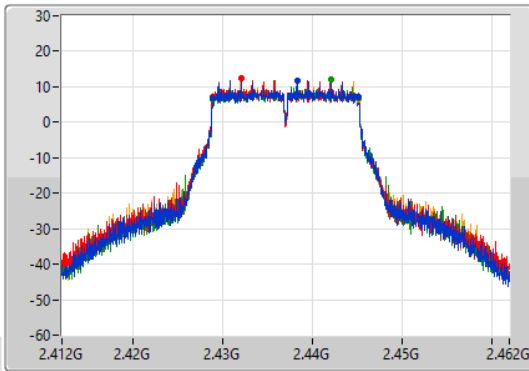
802.11g_Nss1,(6Mbps)_4TX

EBW

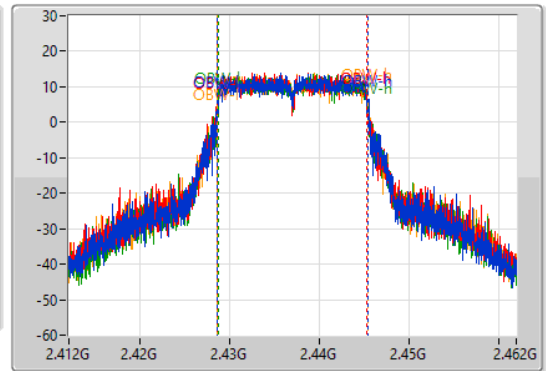
2437MHz

24/03/2022

CF
2.437GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.437GHz
Span
50MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.42885G	2.445175G	16.792M	2.428629G	2.445421G	500k	1
16.325M	2.42885G	2.445175G	16.742M	2.428604G	2.445346G	500k	2
16.325M	2.42885G	2.445175G	16.717M	2.428654G	2.445371G	500k	3
16.35M	2.42885G	2.4452G	16.767M	2.428629G	2.445396G	500k	4

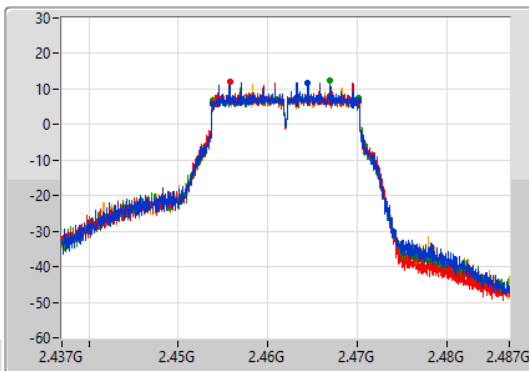
802.11g_Nss1,(6Mbps)_4TX

EBW

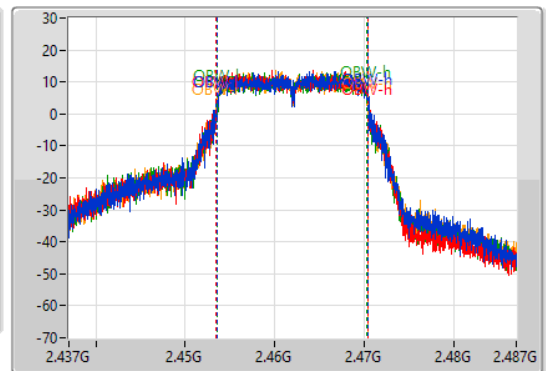
2462MHz

24/03/2022

CF
2.462GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.462GHz
Span
50MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.45385G	2.470175G	16.942M	2.453554G	2.470496G	500k	1
16.35M	2.45385G	2.4702G	16.992M	2.453479G	2.470471G	500k	2
16.275M	2.453875G	2.47015G	16.817M	2.453529G	2.470346G	500k	3
16.325M	2.45385G	2.470175G	16.942M	2.453479G	2.470421G	500k	4



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	19.075M	19.115M	19M1D1D	18.8M	18.991M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	37.75M	38.031M	38M0D1D	37.45M	37.781M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth



Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	18.925M	19.09M	18.875M	19.015M	18.8M	19.115M	18.8M	19.09M
2437MHz	Pass	500k	19M	19.015M	19.075M	18.991M	18.975M	19.04M	19M	18.991M
2462MHz	Pass	500k	18.95M	19.09M	18.85M	19.115M	18.825M	19.09M	18.85M	19.115M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	37.75M	37.931M	37.45M	37.931M	37.5M	37.981M	37.65M	37.981M
2437MHz	Pass	500k	37.6M	37.781M	37.45M	37.881M	37.65M	37.831M	37.6M	37.931M
2452MHz	Pass	500k	37.75M	38.031M	37.55M	38.031M	37.55M	37.981M	37.5M	38.031M

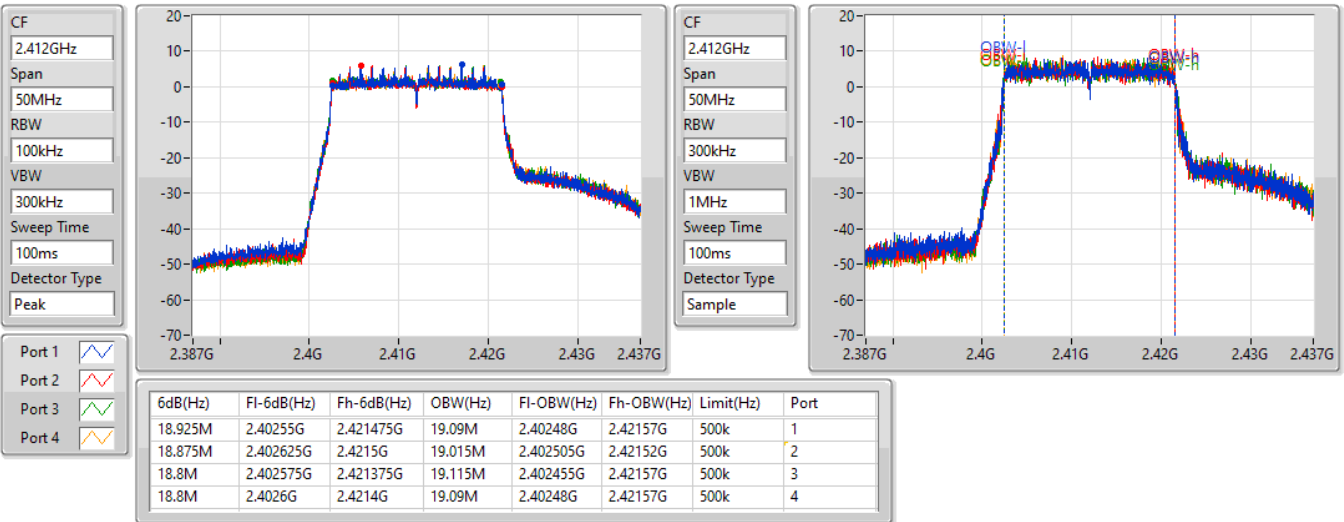
Port X-N dB = Port X 6dB down bandwidth;
 Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

EBW

2412MHz

24/03/2022

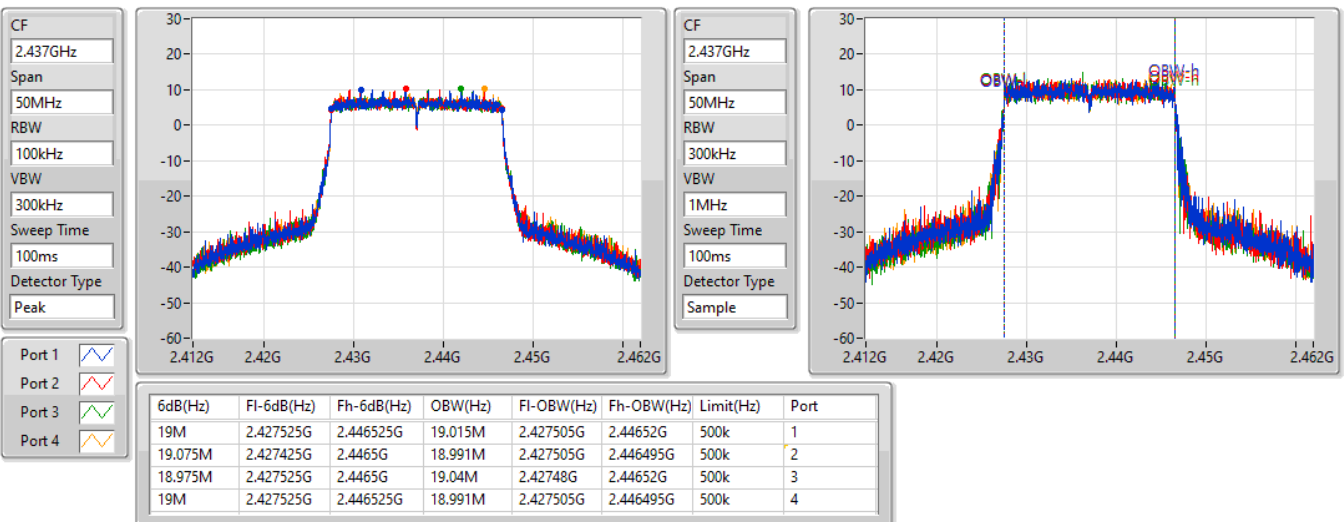


802.11ax HEW20-BF_Nss1,(MCS0)_4TX

EBW

2437MHz

24/03/2022



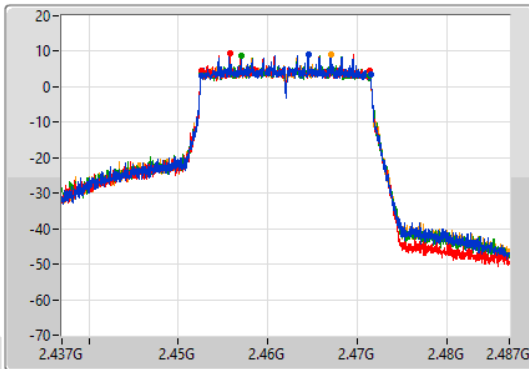
802.11ax HEW20-BF_Nss1,(MCS0)_4TX

EBW

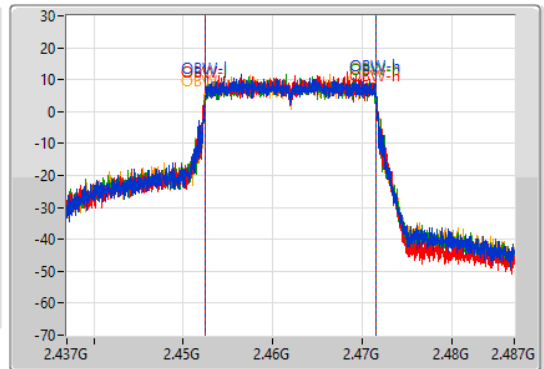
2462MHz

24/03/2022

CF
2.462GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.462GHz
Span
50MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.95M	2.45255G	2.4715G	19.09M	2.452455G	2.471545G	500k	1
18.85M	2.452575G	2.471425G	19.115M	2.45243G	2.471545G	500k	2
18.825M	2.452575G	2.4714G	19.09M	2.45243G	2.47152G	500k	3
18.85M	2.4526G	2.47145G	19.115M	2.452405G	2.47152G	500k	4

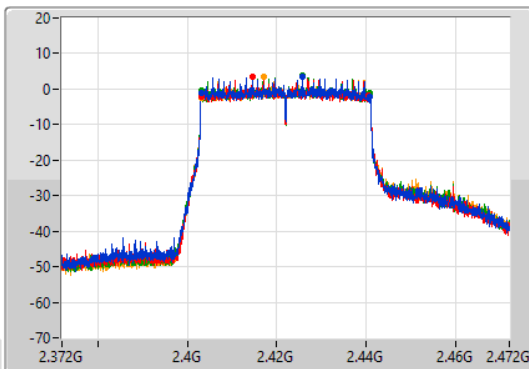
802.11ax HEW40-BF_Nss1,(MCS0)_4TX

EBW

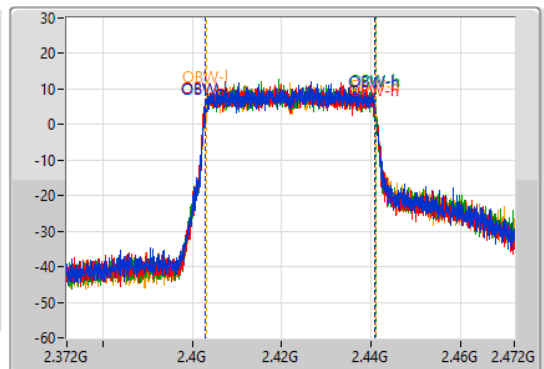
2422MHz

24/03/2022

CF
2.422GHz
Span
100MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.422GHz
Span
100MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.75M	2.4031G	2.44085G	37.931M	2.403009G	2.440941G	500k	1
37.45M	2.4031G	2.44055G	37.931M	2.403009G	2.440941G	500k	2
37.5M	2.40325G	2.44075G	37.981M	2.403009G	2.440991G	500k	3
37.65M	2.40315G	2.4408G	37.981M	2.403059G	2.44104G	500k	4

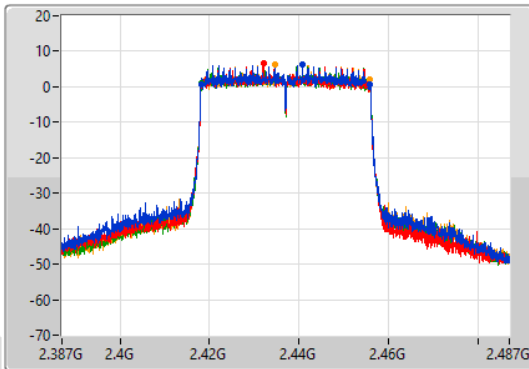
802.11ax HEW40-BF_Nss1,(MCS0)_4TX

EBW

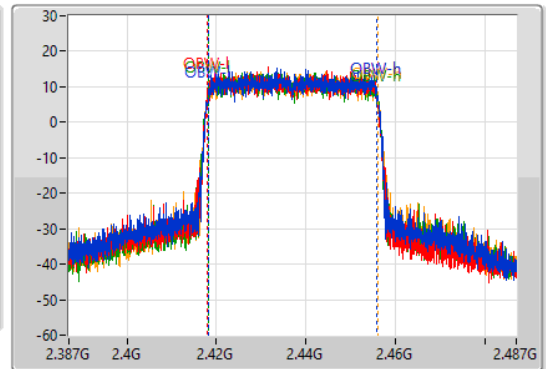
2437MHz

24/03/2022

CF
2.437GHz
Span
100MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.437GHz
Span
100MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.6M	2.41815G	2.45575G	37.781M	2.418109G	2.455891G	500k	1
37.45M	2.4182G	2.45565G	37.881M	2.418009G	2.455891G	500k	2
37.65M	2.4182G	2.45585G	37.831M	2.418059G	2.455891G	500k	3
37.6M	2.41815G	2.45575G	37.931M	2.418059G	2.455991G	500k	4

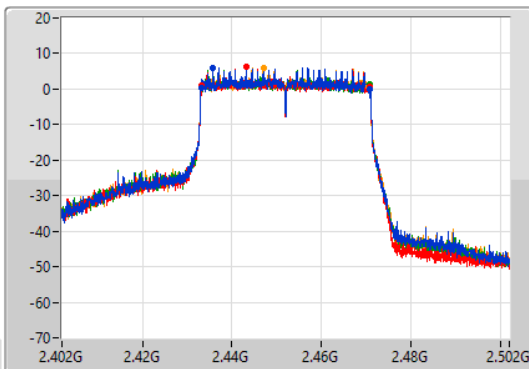
802.11ax HEW40-BF_Nss1,(MCS0)_4TX

EBW

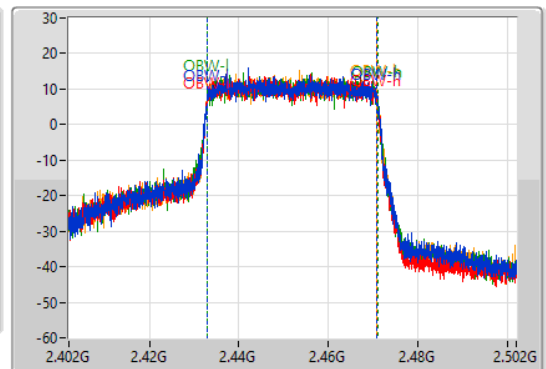
2452MHz

24/03/2022

CF
2.452GHz
Span
100MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.452GHz
Span
100MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.75M	2.4331G	2.47085G	38.031M	2.43291G	2.470941G	500k	1
37.55M	2.43315G	2.4707G	38.031M	2.43291G	2.470941G	500k	2
37.55M	2.4332G	2.47075G	37.981M	2.433009G	2.470991G	500k	3
37.5M	2.4331G	2.4706G	38.031M	2.43291G	2.470941G	500k	4



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	19M	19.09M	19M1D1D	18.725M	19.015M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth



Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	18.85M	19.09M	18.75M	19.065M	18.85M	19.04M	18.725M	19.065M
2437MHz	Pass	500k	18.925M	19.065M	18.975M	19.015M	18.975M	19.04M	19M	19.015M
2462MHz	Pass	500k	18.925M	19.065M	18.825M	19.04M	18.9M	19.09M	18.9M	19.065M

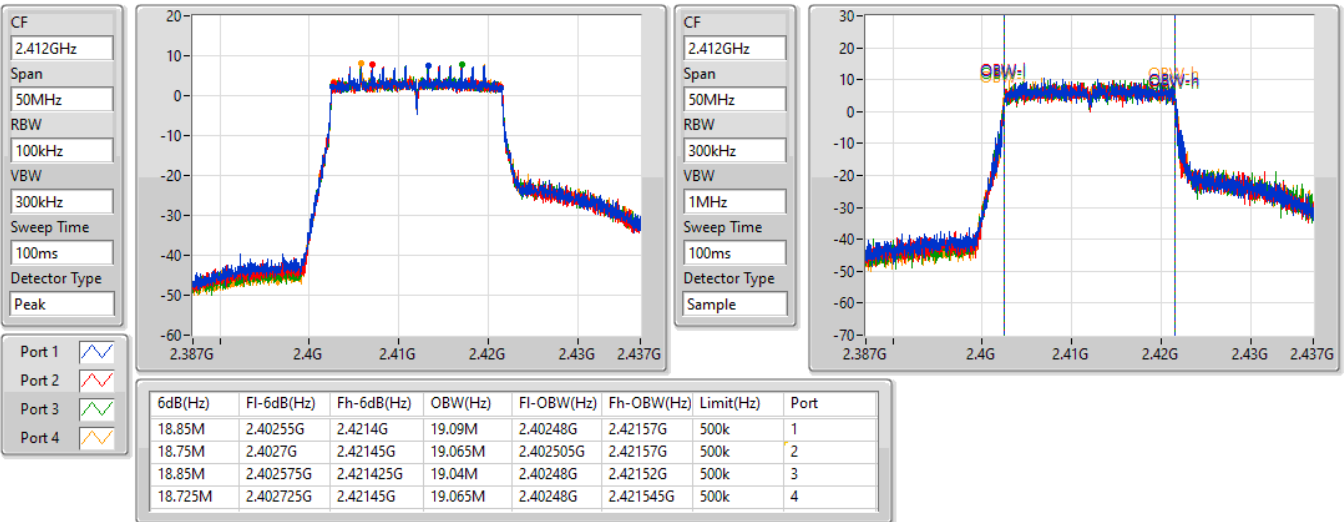
Port X-N dB = Port X 6dB down bandwidth:
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

EBW

2412MHz

24/03/2022

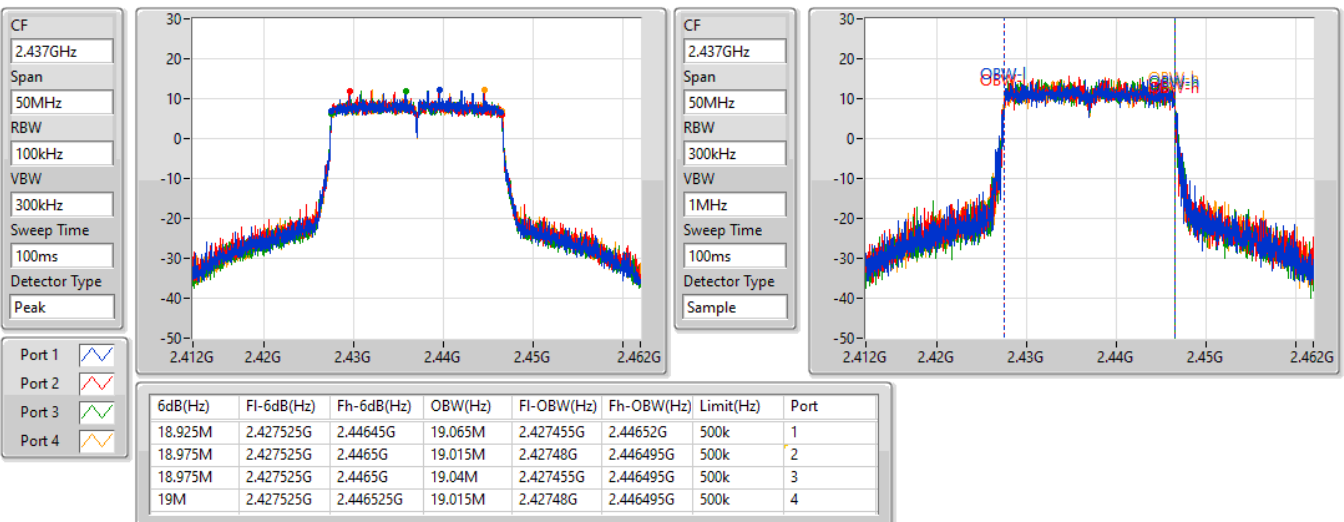


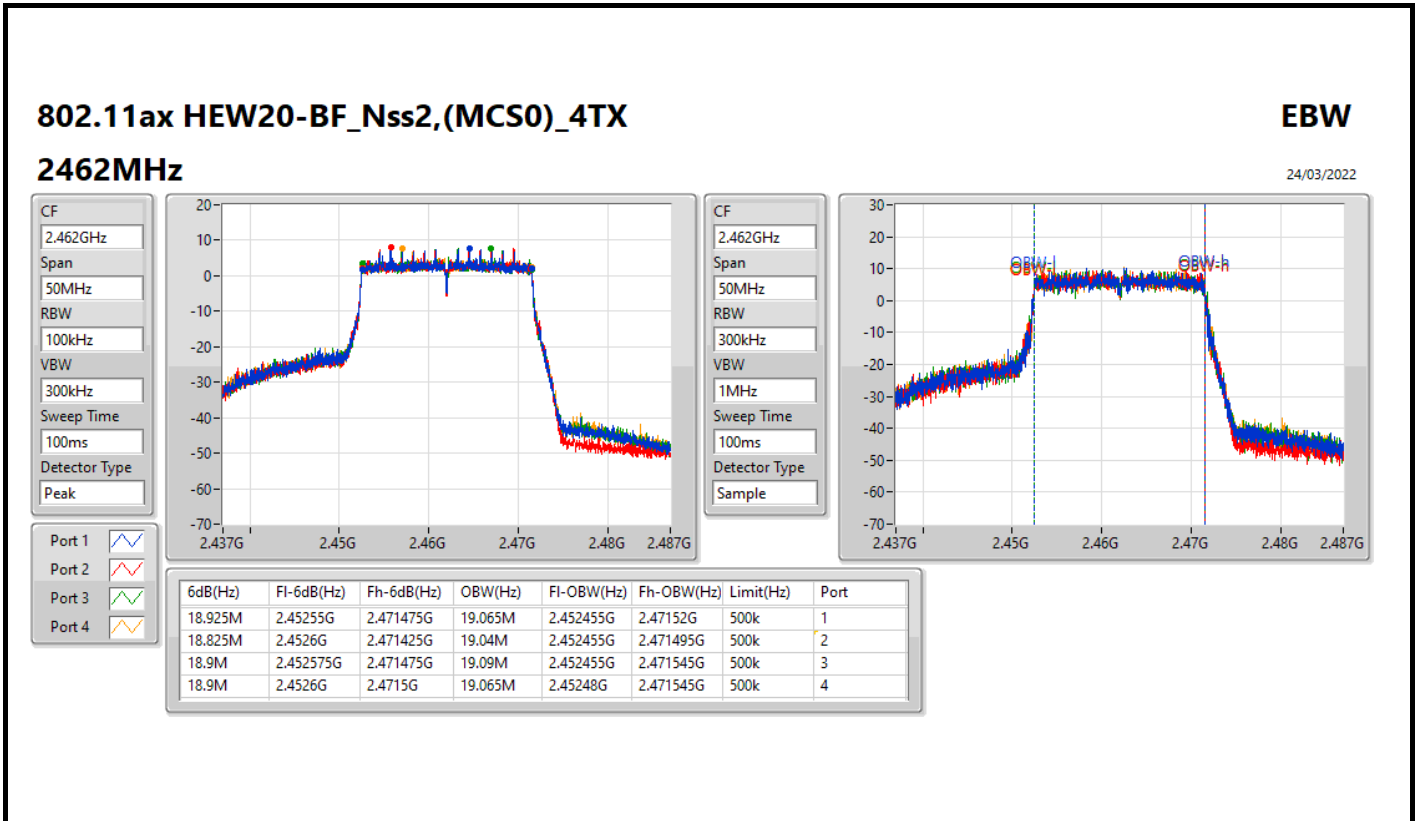
802.11ax HEW20-BF_Nss2,(MCS0)_4TX

EBW

2437MHz

24/03/2022







Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_4TX	29.93	0.98401
802.11g_Nss1,(6Mbps)_4TX	29.80	0.95499



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	3.93	23.97	23.87	23.63	23.73	29.82	30.00
2417MHz	Pass	3.93	23.89	23.82	23.77	23.81	29.84	30.00
2437MHz	Pass	3.93	23.78	23.99	23.98	23.87	29.93	30.00
2462MHz	Pass	3.93	23.34	23.18	23.07	23.23	29.23	30.00
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	3.93	20.32	22.66	20.39	19.37	26.88	30.00
2417MHz	Pass	3.93	23.24	23.43	23.38	23.20	29.33	30.00
2437MHz	Pass	3.93	23.70	23.96	23.70	23.74	29.80	30.00
2462MHz	Pass	3.93	22.70	22.45	22.80	22.79	28.71	30.00

DG = Directional Gain; Port X = Port X output power



Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	28.32	0.67920
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	26.95	0.49545



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	7.60	16.97	16.98	16.62	17.00	22.92	28.40
2417MHz	Pass	7.60	22.37	22.33	22.08	22.04	28.23	28.40
2437MHz	Pass	7.60	22.26	22.20	22.24	22.48	28.32	28.40
2457MHz	Pass	7.60	21.62	21.75	21.48	21.69	27.66	28.40
2462MHz	Pass	7.60	19.89	20.03	20.30	20.00	26.08	28.40
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	7.60	17.64	17.64	17.84	17.29	23.63	28.40
2437MHz	Pass	7.60	21.05	20.76	20.89	21.00	26.95	28.40
2452MHz	Pass	7.60	20.44	20.09	19.99	20.34	26.24	28.40

DG = Directional Gain; Port X = Port X output power



Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	29.94	0.98628



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	4.60	18.64	18.74	18.69	18.90	24.76	30.00
2417MHz	Pass	4.60	21.61	21.79	21.62	21.98	27.77	30.00
2437MHz	Pass	4.60	23.83	23.91	23.93	24.02	29.94	30.00
2457MHz	Pass	4.60	22.48	22.83	22.40	22.41	28.55	30.00
2462MHz	Pass	4.60	18.53	18.61	18.66	18.64	24.63	30.00

DG = Directional Gain; Port X = Port X output power



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_4TX	6.33
802.11g_Nss1,(6Mbps)_4TX	2.86

RBW = 3kHz;



Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	7.60	0.55	3.03	0.96	0.20	5.50	6.40
2417MHz								
2437MHz	Pass	7.60	0.62	2.30	1.04	0.30	6.33	6.40
2462MHz	Pass	7.60	0.25	3.63	0.54	0.72	5.76	6.40
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	7.60	-4.99	-3.52	-4.84	-5.50	-0.69	6.40
2417MHz								
2437MHz	Pass	7.60	-2.16	-2.16	-1.91	-1.96	2.86	6.40
2462MHz	Pass	7.60	-2.98	-2.30	-3.20	-2.76	0.82	6.40

DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11b_Nss1,(1Mbps)_4TX

PSD

2412MHz

24/03/2022

CF
2.412GHz

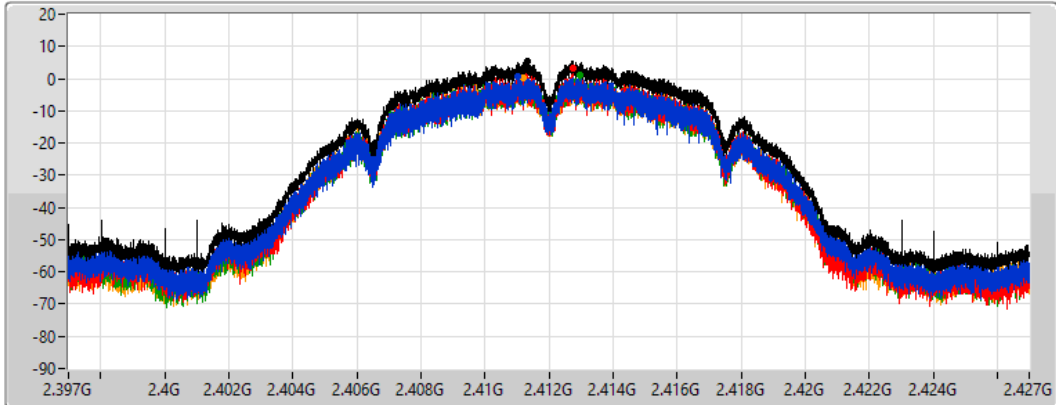
Span
30MHz


RBW
3kHz


VBW
10kHz


Sweep Time
4.424357ms


Detector Type
Peak




Sum 

Port 1 

Port 2 

Port 3 

Port 4 

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.50	5.50	0.55	3.03	0.96	0.20

802.11b_Nss1,(1Mbps)_4TX

PSD

2437MHz

24/03/2022

CF
2.437GHz

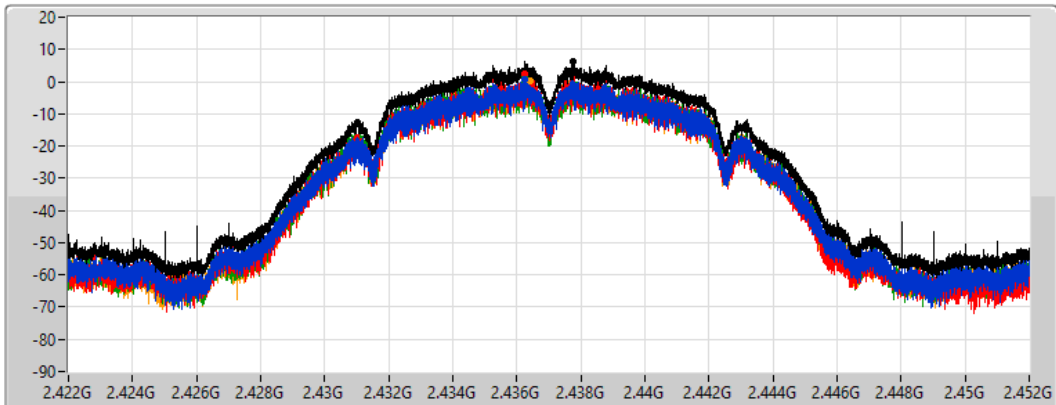
Span
30MHz


RBW
3kHz


VBW
10kHz


Sweep Time
4.424357ms


Detector Type
Peak




Sum 

Port 1 

Port 2 

Port 3 

Port 4 

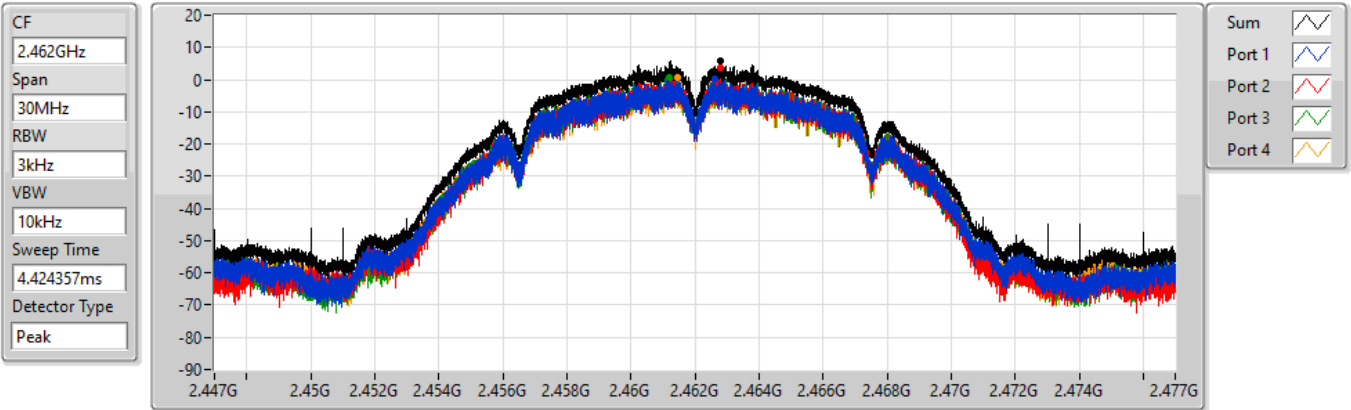
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.33	6.33	0.62	2.30	1.04	0.30

802.11b_Nss1,(1Mbps)_4TX

PSD

2462MHz

24/03/2022



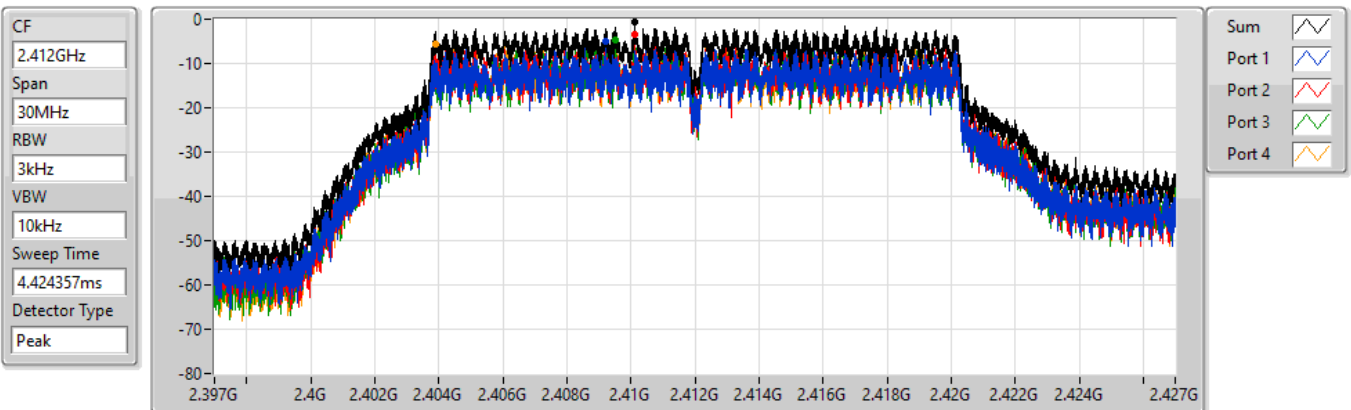
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.76	5.76	0.25	3.63	0.54	0.72

802.11g_Nss1,(6Mbps)_4TX

PSD

2412MHz

24/03/2022



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.69	-0.69	-4.99	-3.52	-4.84	-5.50

802.11g_Nss1,(6Mbps)_4TX

PSD

2437MHz

24/03/2022

CF
2.437GHz

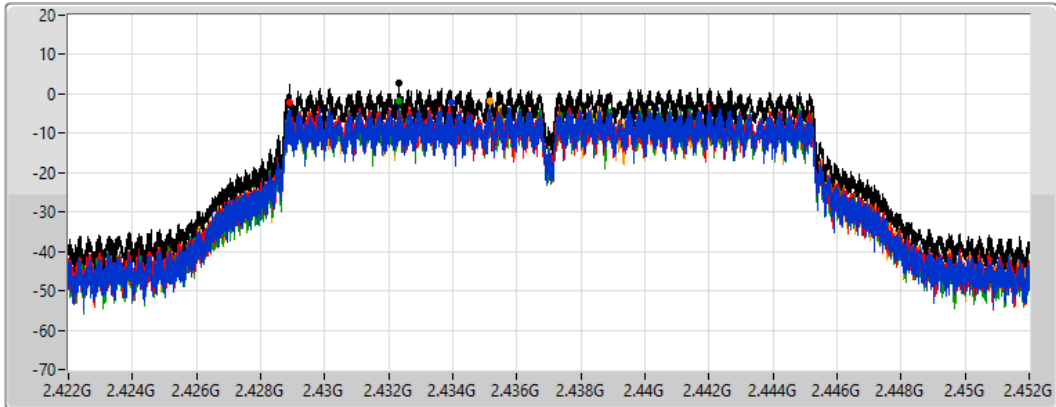
Span
30MHz


RBW
3kHz


VBW
10kHz


Sweep Time
4.424357ms


Detector Type
Peak




Sum 

Port 1 

Port 2 

Port 3 

Port 4 

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.86	2.86	-2.16	-2.16	-1.91	-1.96

802.11g_Nss1,(6Mbps)_4TX

PSD

2462MHz

24/03/2022

CF
2.462GHz

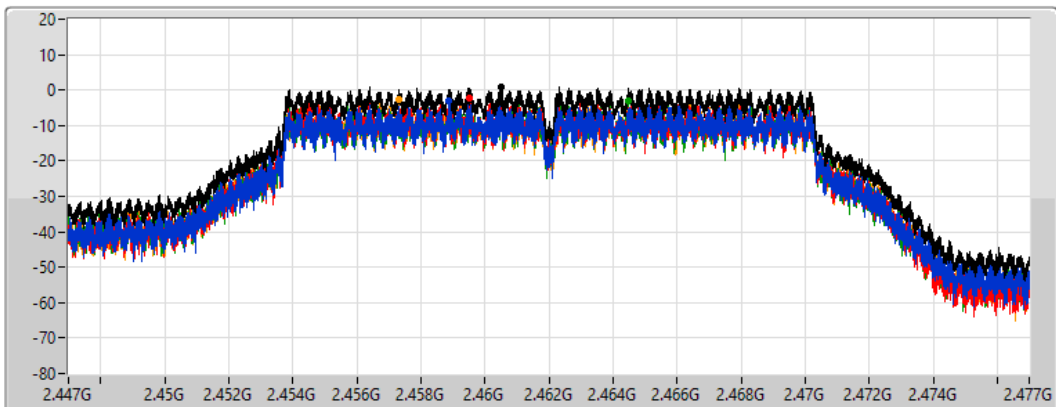
Span
30MHz


RBW
3kHz


VBW
10kHz


Sweep Time
4.424357ms


Detector Type
Peak




Sum 

Port 1 

Port 2 

Port 3 

Port 4 

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.82	0.82	-2.98	-2.30	-3.20	-2.76



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	0.29
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-3.92

RBW = 3kHz;



Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	7.60	-10.53	-9.44	-10.27	-9.42	-5.70	6.40
2437MHz	Pass	7.60	-4.42	-4.16	-3.81	-4.82	0.29	6.40
2462MHz	Pass	7.60	-7.60	-7.05	-6.97	-6.67	-2.46	6.40
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	7.60	-12.49	-11.10	-12.15	-12.32	-7.20	6.40
2437MHz	Pass	7.60	-7.49	-8.37	-8.56	-8.22	-3.92	6.40
2452MHz	Pass	7.60	-9.52	-9.15	-9.69	-8.90	-4.67	6.40

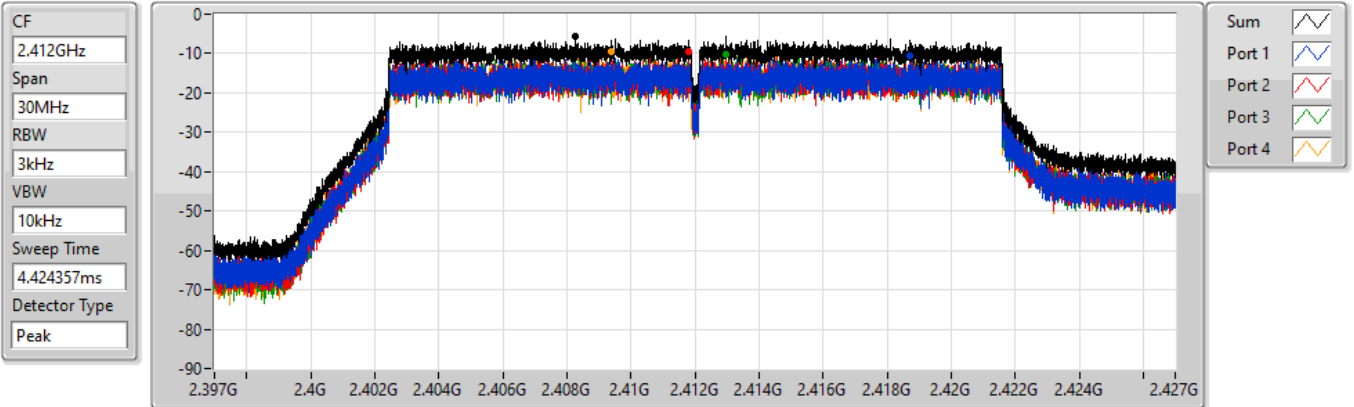
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

2412MHz

24/03/2022



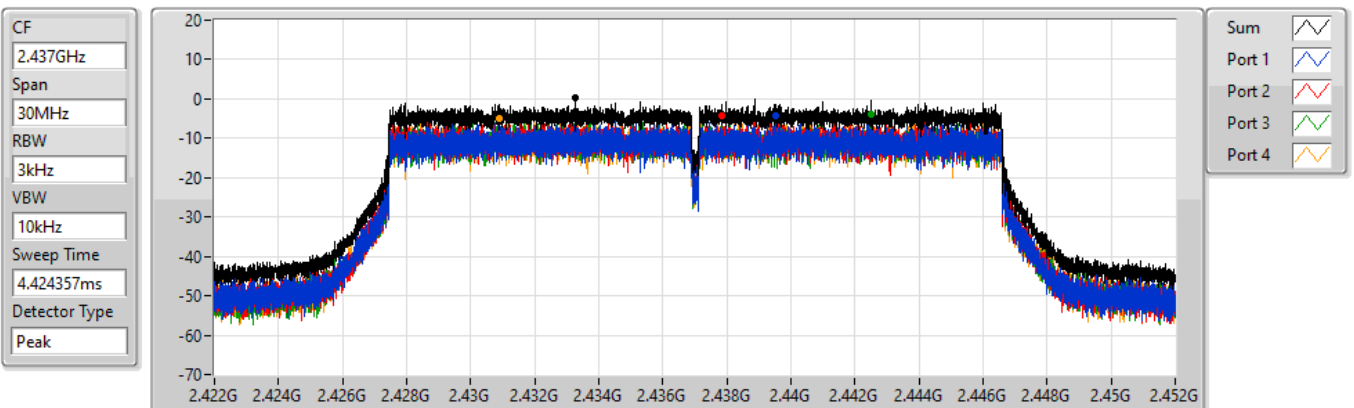
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.70	-5.70	-10.53	-9.44	-10.27	-9.42

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

2437MHz

24/03/2022



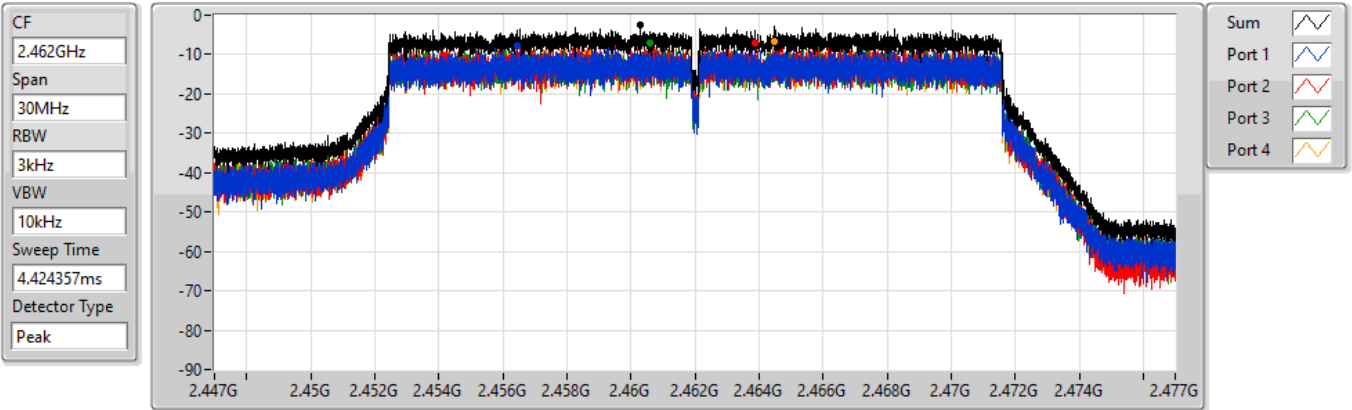
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.29	0.29	-4.42	-4.16	-3.81	-4.82

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

2462MHz

24/03/2022



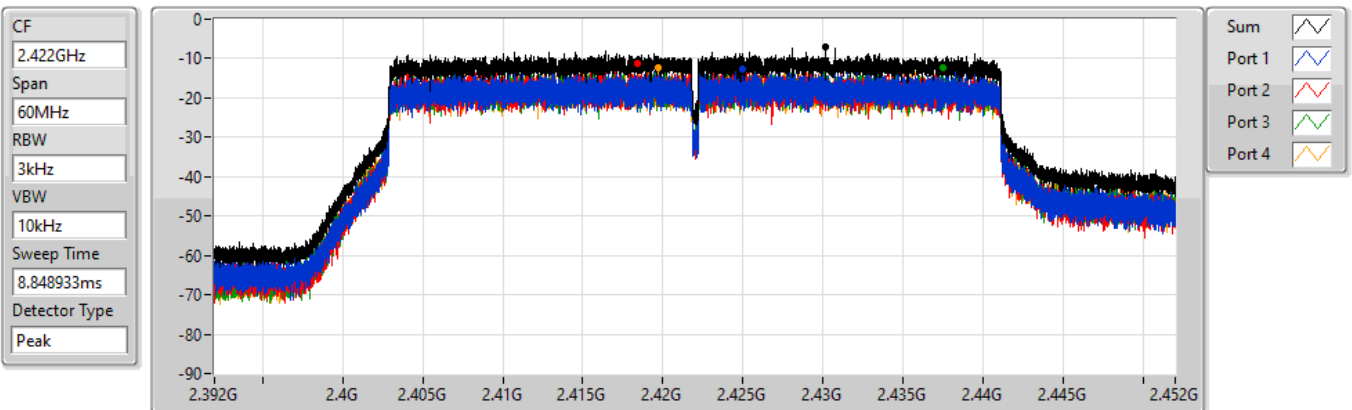
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.46	-2.46	-7.60	-7.05	-6.97	-6.67

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

PSD

2422MHz

24/03/2022



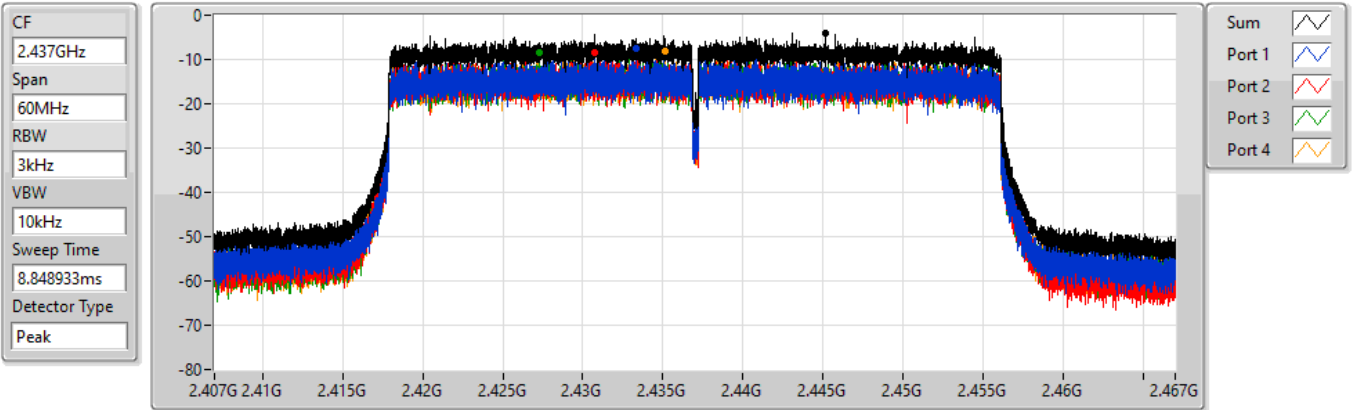
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.20	-7.20	-12.49	-11.10	-12.15	-12.32

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

PSD

2437MHz

24/03/2022



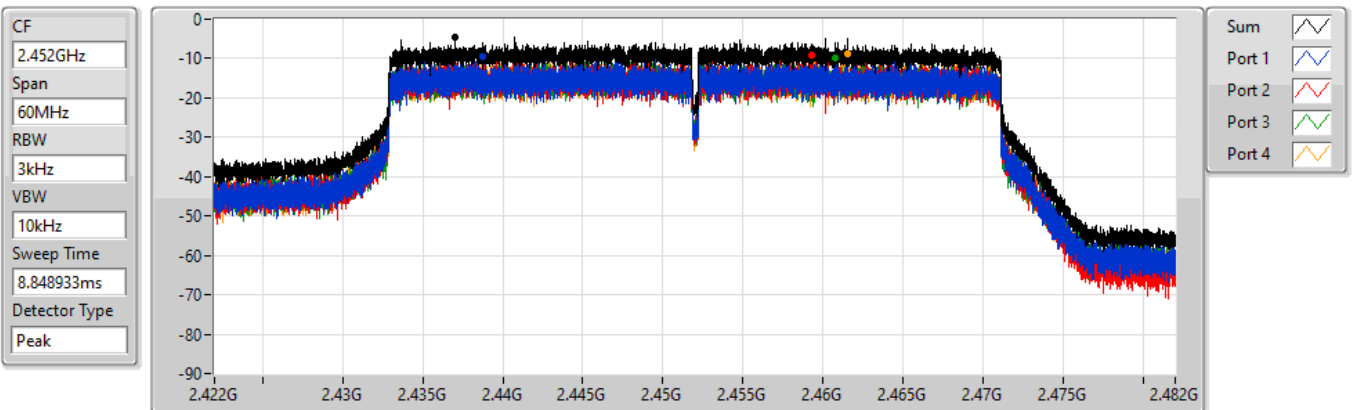
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.92	-3.92	-7.49	-8.37	-8.56	-8.22

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

PSD

2452MHz

24/03/2022



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.67	-4.67	-9.52	-9.15	-9.69	-8.90



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	1.64

RBW = 3kHz:



Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	4.60	-7.05	-6.91	-7.40	-8.06	-2.72	8.00
2437MHz	Pass	4.60	-3.10	-0.53	-2.19	-2.65	1.64	8.00
2462MHz	Pass	4.60	-8.12	-6.55	-8.15	-8.20	-4.03	8.00

DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

PSD

2412MHz

24/03/2022

CF
2.412GHz

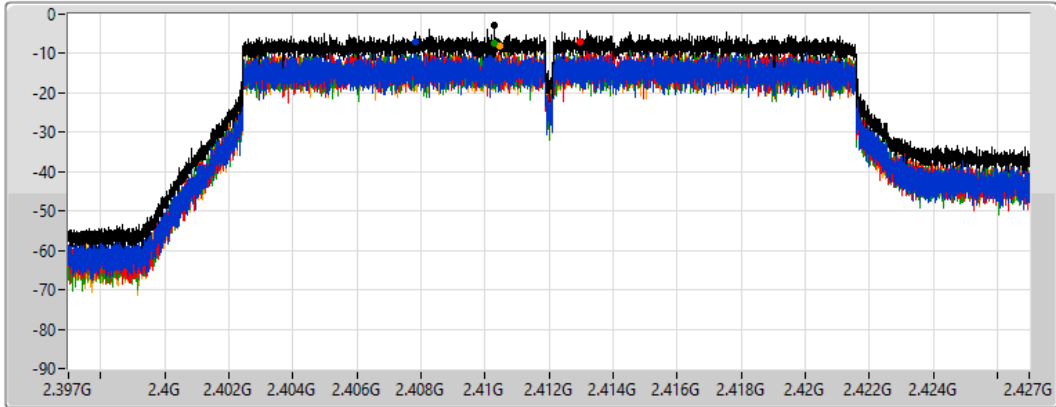
Span
30MHz


RBW
3kHz


VBW
10kHz


Sweep Time
4.424357ms


Detector Type
Peak




Sum 

Port 1 

Port 2 

Port 3 

Port 4 

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.72	-2.72	-7.05	-6.91	-7.40	-8.06

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

PSD

2437MHz

24/03/2022

CF
2.437GHz

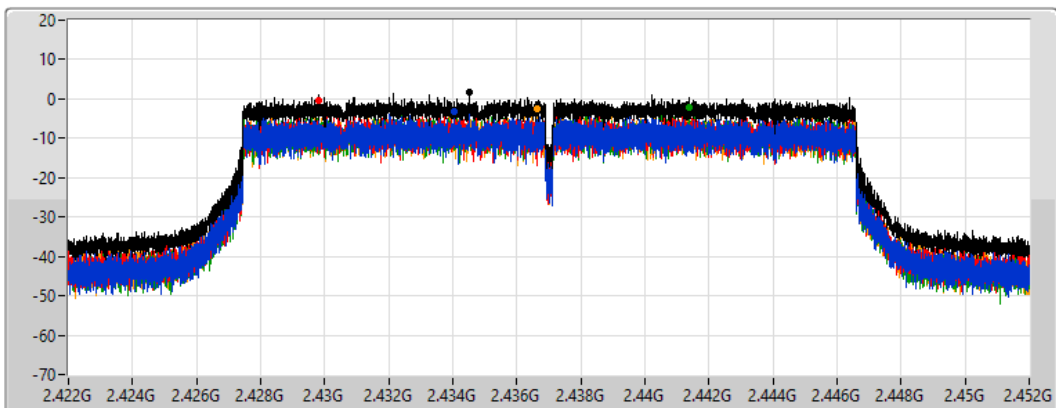
Span
30MHz


RBW
3kHz


VBW
10kHz


Sweep Time
4.424357ms


Detector Type
Peak




Sum 

Port 1 

Port 2 

Port 3 

Port 4 

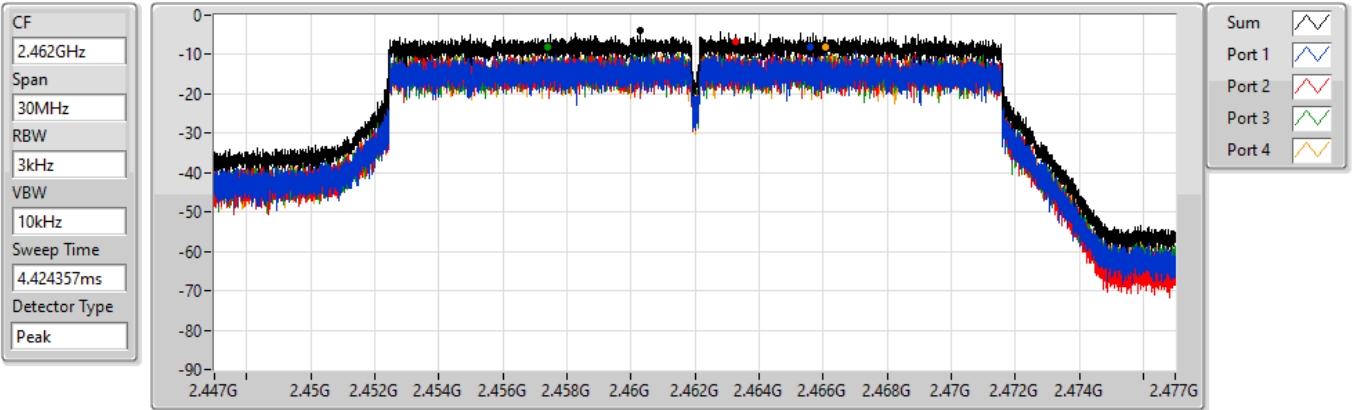
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.64	1.64	-3.10	-0.53	-2.19	-2.65

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

PSD

2462MHz

24/03/2022



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.03	-4.03	-8.12	-6.55	-8.15	-8.20



Summary

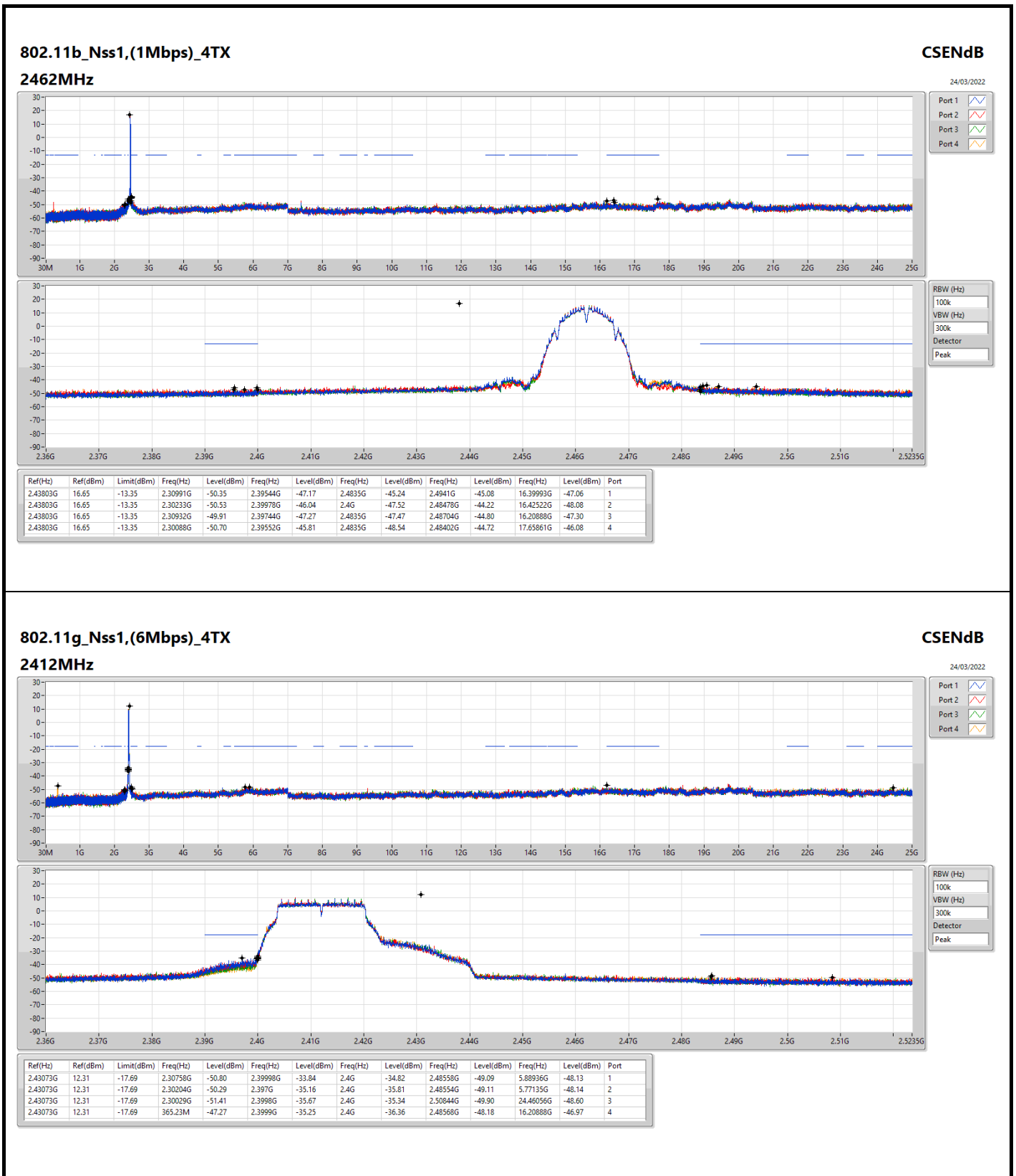
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_4TX	Pass	2.43803G	16.65	-13.35	2.30437G	-49.58	2.39848G	-36.18	2.4G	-41.16	2.49166G	-48.36	5.95117G	-46.98	1
802.11g_Nss1,(6Mbps)_4TX	Pass	2.43073G	12.31	-17.69	2.30758G	-50.80	2.39998G	-33.84	2.4G	-34.82	2.48558G	-49.09	5.88936G	-48.13	1



Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43803G	16.65	-13.35	2.30437G	-49.58	2.39848G	-36.18	2.4G	-41.16	2.49166G	-48.36	5.95117G	-46.98	1
2412MHz	Pass	2.43803G	16.65	-13.35	362.9M	-43.56	2.398G	-38.23	2.4G	-40.43	2.48888G	-47.03	17.66985G	-47.50	2
2412MHz	Pass	2.43803G	16.65	-13.35	359.11M	-42.23	2.39956G	-36.41	2.4G	-41.27	2.48528G	-47.94	5.91745G	-48.75	3
2412MHz	Pass	2.43803G	16.65	-13.35	2.30321G	-48.38	2.39856G	-38.73	2.4G	-44.38	2.48472G	-46.19	17.69514G	-47.77	4
2437MHz	Pass	2.43803G	16.65	-13.35	2.3035G	-49.90	2.39806G	-44.38	2.4G	-48.55	2.48392G	-46.50	16.43083G	-47.33	1
2437MHz	Pass	2.43803G	16.65	-13.35	2.30641G	-48.75	2.39702G	-44.70	2.4G	-44.64	2.4867G	-46.77	5.94274G	-48.61	2
2437MHz	Pass	2.43803G	16.65	-13.35	2.30728G	-49.81	2.39762G	-45.80	2.4G	-47.85	2.49068G	-46.54	6.54679G	-47.88	3
2437MHz	Pass	2.43803G	16.65	-13.35	2.30758G	-49.65	2.39024G	-45.59	2.4835G	-47.19	2.48484G	-46.21	16.63312G	-48.49	4
2462MHz	Pass	2.43803G	16.65	-13.35	2.30991G	-50.35	2.39544G	-47.17	2.4835G	-45.24	2.4941G	-45.08	16.39993G	-47.06	1
2462MHz	Pass	2.43803G	16.65	-13.35	2.30233G	-50.53	2.39978G	-46.04	2.4G	-47.52	2.48478G	-44.22	16.42522G	-48.08	2
2462MHz	Pass	2.43803G	16.65	-13.35	2.30932G	-49.91	2.39744G	-47.27	2.4835G	-47.47	2.48704G	-44.80	16.20888G	-47.30	3
2462MHz	Pass	2.43803G	16.65	-13.35	2.30088G	-50.70	2.39552G	-45.81	2.4835G	-48.54	2.48402G	-44.72	17.65861G	-46.08	4
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43073G	12.31	-17.69	2.30758G	-50.80	2.39998G	-33.84	2.4G	-34.82	2.48558G	-49.09	5.88936G	-48.13	1
2412MHz	Pass	2.43073G	12.31	-17.69	2.30204G	-50.29	2.397G	-35.16	2.4G	-35.81	2.48554G	-49.11	5.77135G	-48.14	2
2412MHz	Pass	2.43073G	12.31	-17.69	2.30029G	-51.41	2.3998G	-35.67	2.4G	-35.34	2.50844G	-49.90	24.46056G	-48.60	3
2412MHz	Pass	2.43073G	12.31	-17.69	365.23M	-47.27	2.3999G	-35.25	2.4G	-36.36	2.48568G	-48.18	16.20888G	-46.97	4
2437MHz	Pass	2.43073G	12.31	-17.69	2.30437G	-50.50	2.39816G	-44.58	2.4G	-47.55	2.48482G	-45.79	24.40999G	-47.04	1
2437MHz	Pass	2.43073G	12.31	-17.69	2.30204G	-49.50	2.3999G	-43.72	2.4G	-46.17	2.48358G	-46.26	6.90923G	-48.31	2
2437MHz	Pass	2.43073G	12.31	-17.69	2.30059G	-49.95	2.39894G	-46.03	2.4G	-47.80	2.48378G	-47.03	14.56809G	-47.96	3
2437MHz	Pass	2.43073G	12.31	-17.69	2.30262G	-49.87	2.39394G	-45.04	2.4G	-48.00	2.48386G	-46.26	6.52713G	-47.83	4
2462MHz	Pass	2.43073G	12.31	-17.69	2.19311G	-51.93	2.39898G	-46.53	2.4835G	-42.30	2.4835G	-40.18	16.90284G	-48.02	1
2462MHz	Pass	2.43073G	12.31	-17.69	2.30117G	-49.98	2.3903G	-46.73	2.4835G	-42.94	2.48446G	-43.13	16.24821G	-47.41	2
2462MHz	Pass	2.43073G	12.31	-17.69	2.30699G	-51.10	2.39236G	-46.01	2.4835G	-43.07	2.48382G	-41.70	5.85002G	-47.77	3
2462MHz	Pass	2.43073G	12.31	-17.69	2.30554G	-50.79	2.3973G	-46.25	2.4835G	-43.39	2.48488G	-40.47	17.67266G	-47.78	4



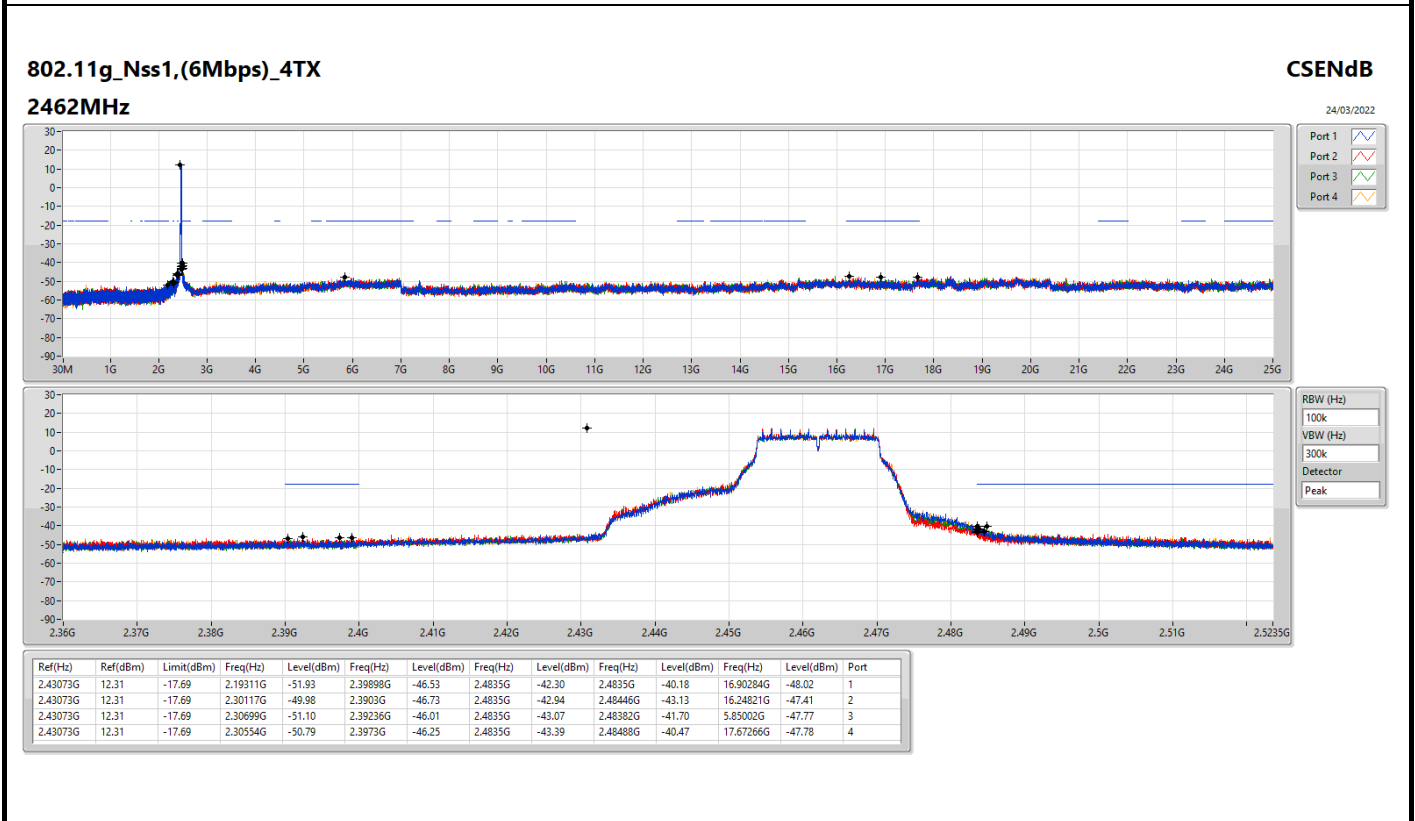
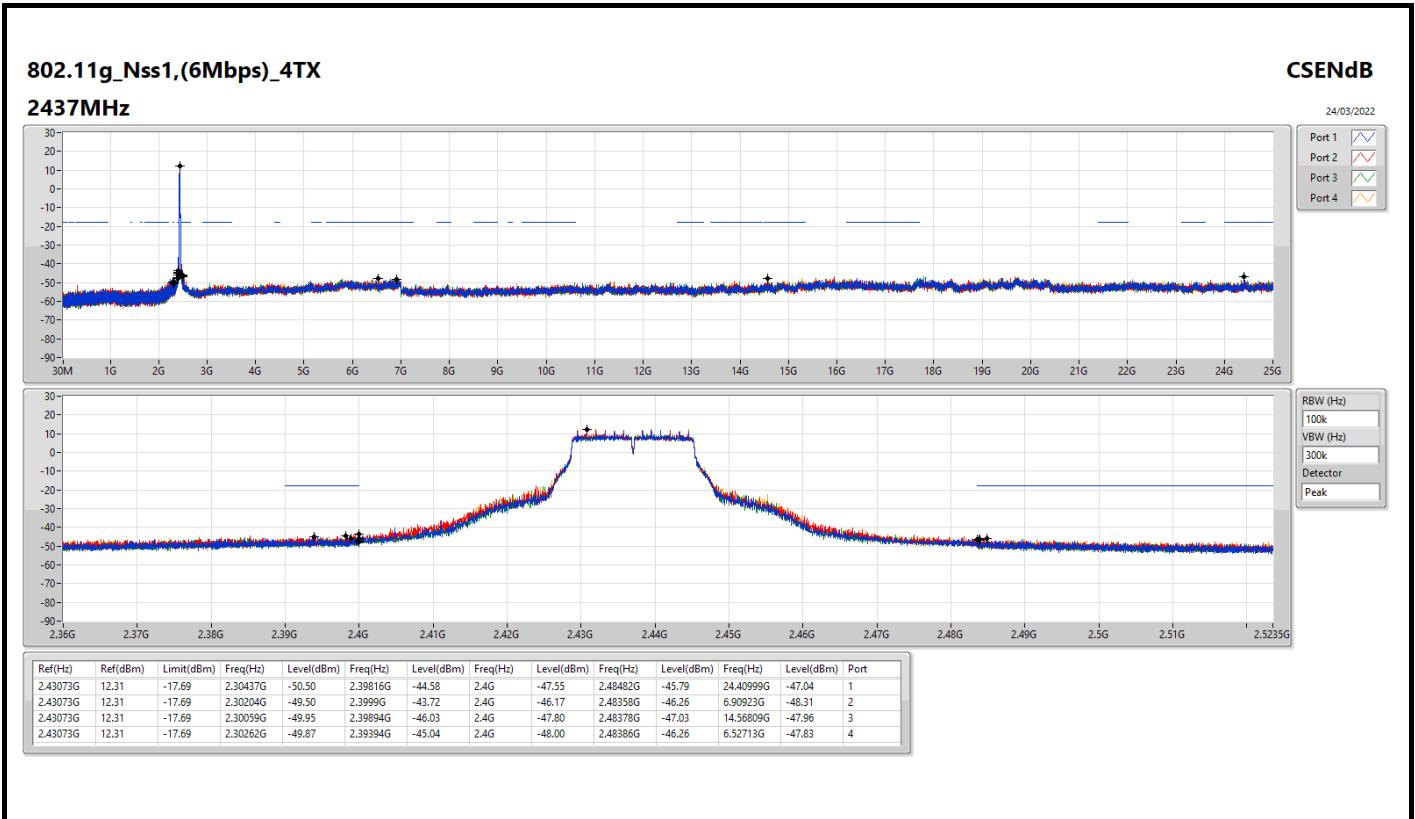


802.11g_Nss1,(6Mbps)_4TX

2412MHz

CSEndB

24/03/2022





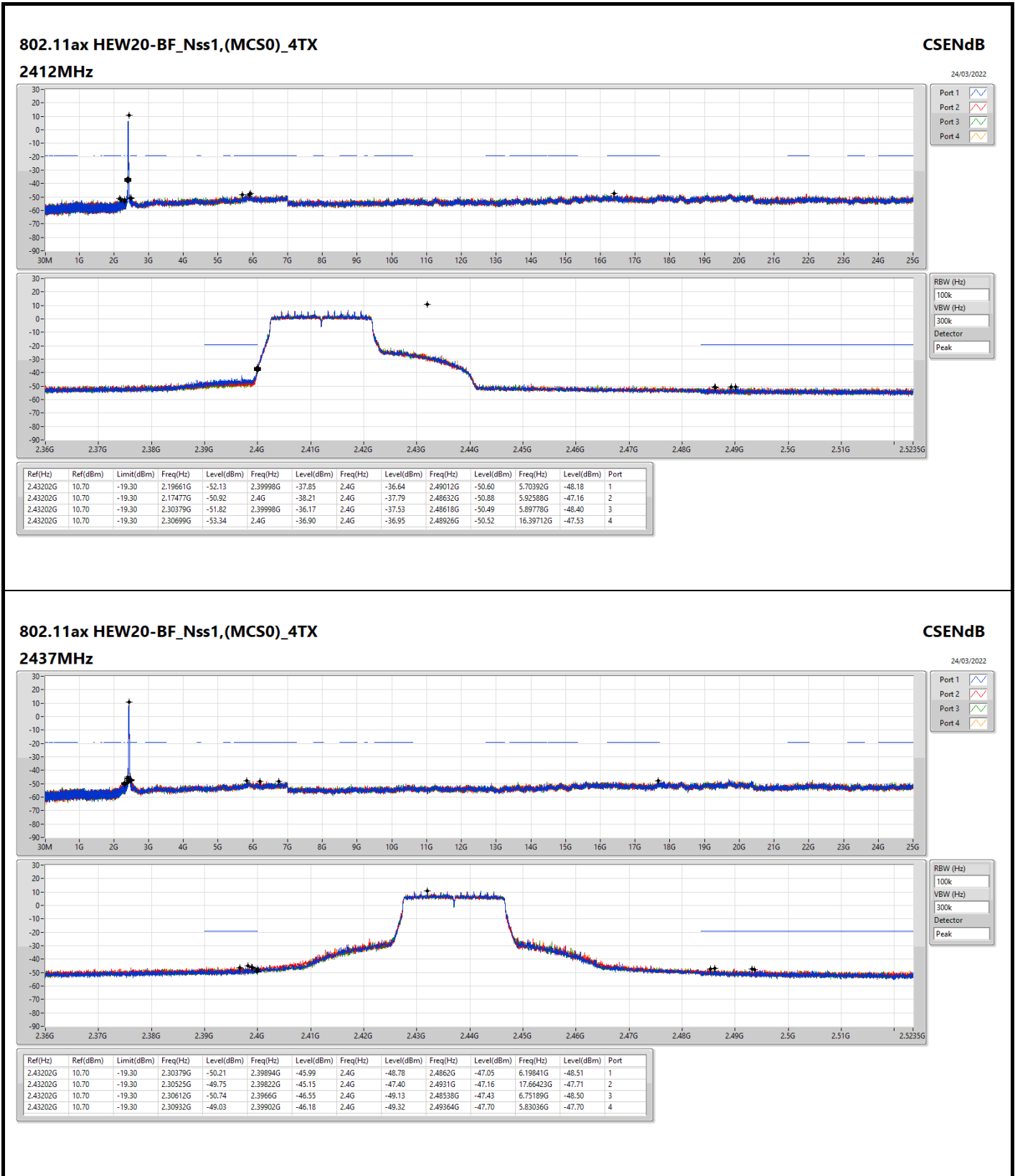
Summary

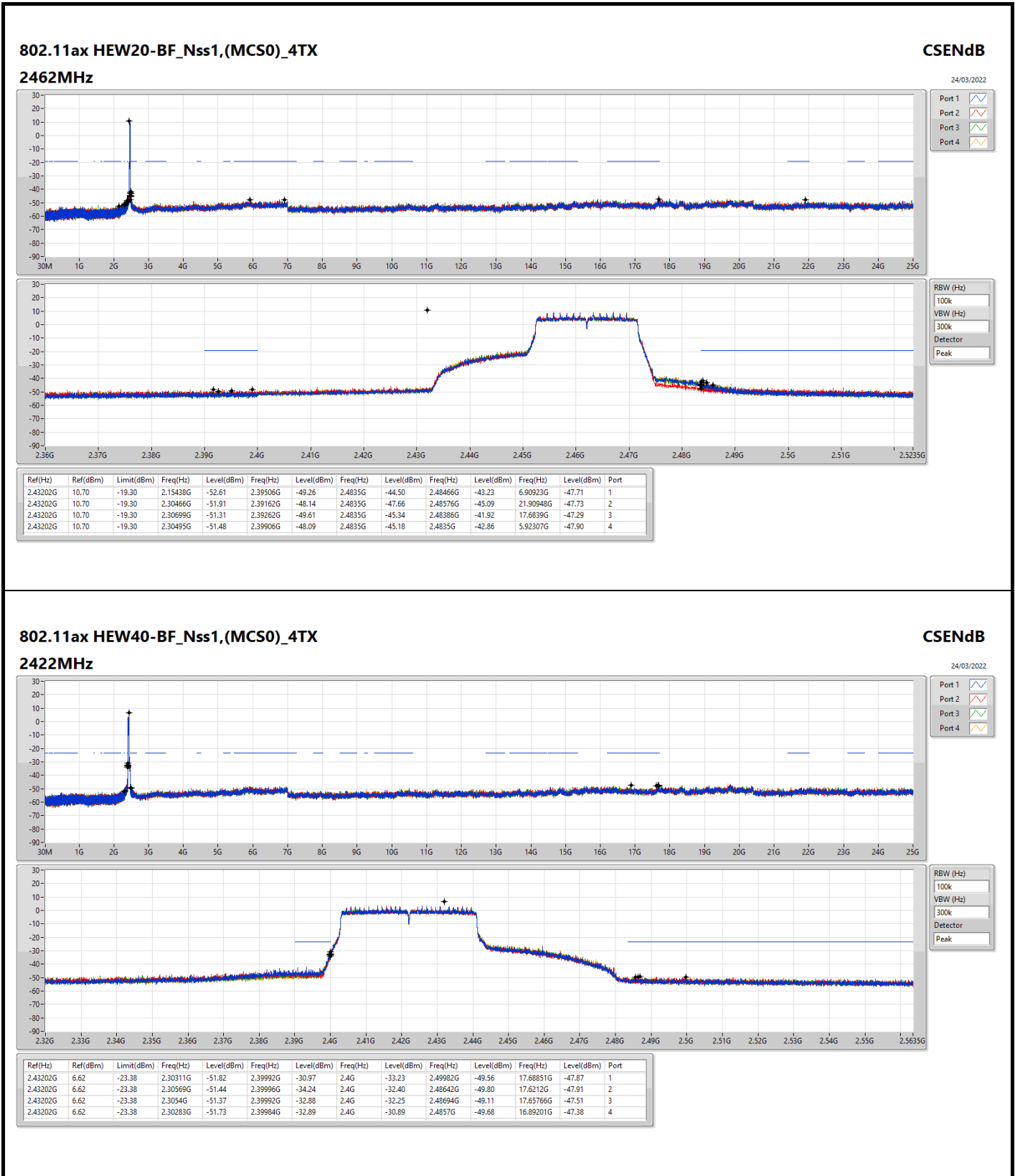
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	Pass	2.43202G	10.70	-19.30	2.30379G	-51.82	2.39998G	-36.17	2.4G	-37.53	2.48618G	-50.49	5.89778G	-48.40	3
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	Pass	2.43202G	6.62	-23.38	2.30283G	-51.73	2.39984G	-32.89	2.4G	-30.89	2.4857G	-49.68	16.89201G	-47.38	4

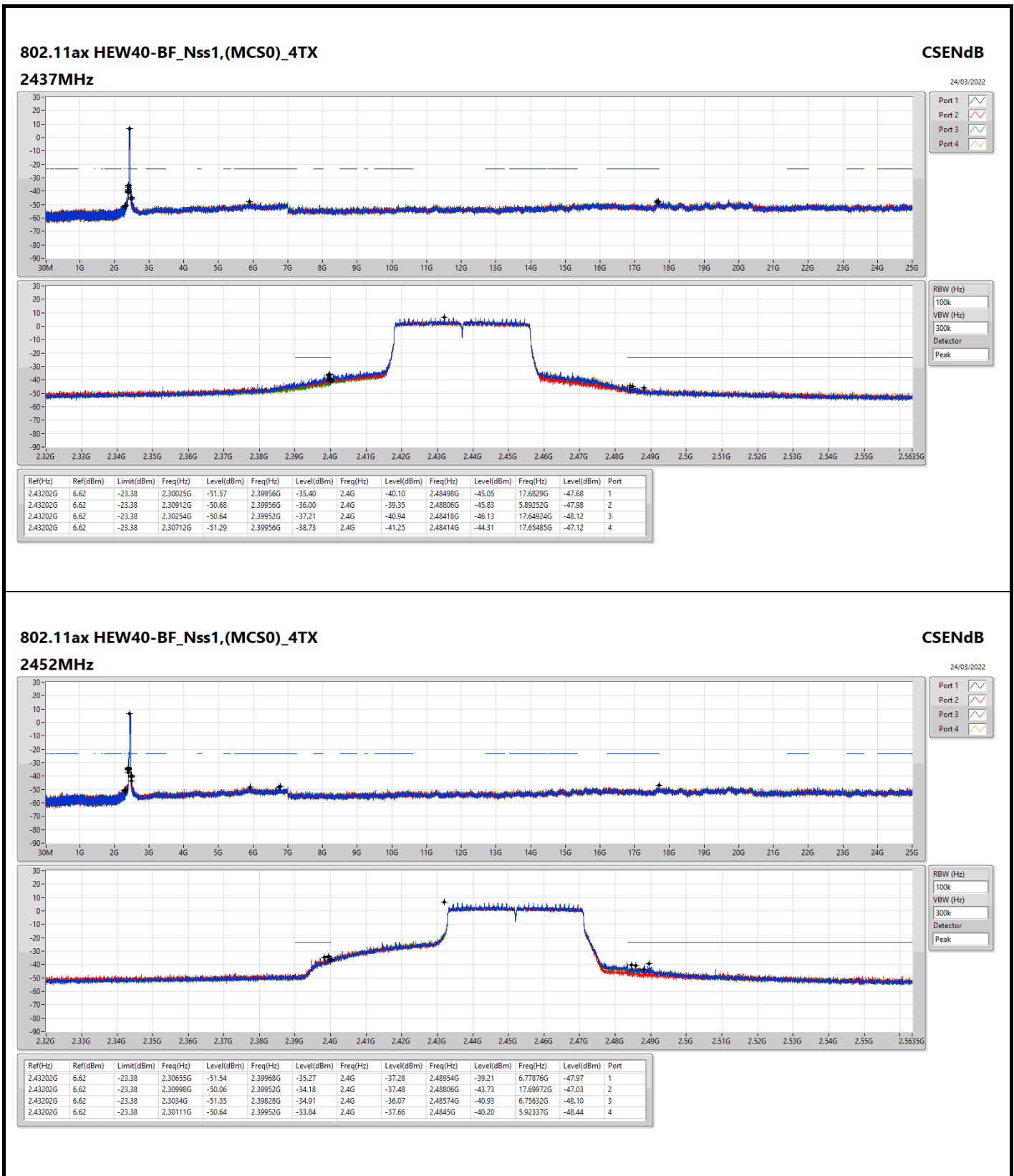


Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43202G	10.70	-19.30	2.19661G	-52.13	2.39998G	-37.85	2.4G	-36.64	2.49012G	-50.60	5.70392G	-48.18	1
2412MHz	Pass	2.43202G	10.70	-19.30	2.17477G	-50.92	2.4G	-38.21	2.4G	-37.79	2.48632G	-50.88	5.92588G	-47.16	2
2412MHz	Pass	2.43202G	10.70	-19.30	2.30379G	-51.82	2.39998G	-36.17	2.4G	-37.53	2.48618G	-50.49	5.89778G	-48.40	3
2412MHz	Pass	2.43202G	10.70	-19.30	2.30699G	-53.34	2.4G	-36.90	2.4G	-36.95	2.48926G	-50.52	16.39712G	-47.53	4
2437MHz	Pass	2.43202G	10.70	-19.30	2.30379G	-50.21	2.39894G	-45.99	2.4G	-48.78	2.4862G	-47.05	6.19841G	-48.51	1
2437MHz	Pass	2.43202G	10.70	-19.30	2.30525G	-49.75	2.39822G	-45.15	2.4G	-47.40	2.4931G	-47.16	17.66423G	-47.71	2
2437MHz	Pass	2.43202G	10.70	-19.30	2.30612G	-50.74	2.3966G	-46.55	2.4G	-49.13	2.48538G	-47.43	6.75189G	-48.50	3
2437MHz	Pass	2.43202G	10.70	-19.30	2.30932G	-49.03	2.39902G	-46.18	2.4G	-49.32	2.49364G	-47.70	5.83036G	-47.70	4
2462MHz	Pass	2.43202G	10.70	-19.30	2.15438G	-52.61	2.39506G	-49.26	2.4835G	-44.50	2.48466G	-43.23	6.90923G	-47.71	1
2462MHz	Pass	2.43202G	10.70	-19.30	2.30466G	-51.91	2.39162G	-48.14	2.4835G	-47.66	2.48576G	-45.09	21.90948G	-47.73	2
2462MHz	Pass	2.43202G	10.70	-19.30	2.30699G	-51.31	2.39262G	-49.61	2.4835G	-45.34	2.48386G	-41.92	17.6839G	-47.29	3
2462MHz	Pass	2.43202G	10.70	-19.30	2.30495G	-51.48	2.39906G	-48.09	2.4835G	-45.18	2.4835G	-42.86	5.92307G	-47.90	4
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.43202G	6.62	-23.38	2.30311G	-51.82	2.39992G	-30.97	2.4G	-33.23	2.49982G	-49.56	17.68851G	-47.87	1
2422MHz	Pass	2.43202G	6.62	-23.38	2.30569G	-51.44	2.39996G	-34.24	2.4G	-32.40	2.48642G	-49.80	17.6212G	-47.91	2
2422MHz	Pass	2.43202G	6.62	-23.38	2.3054G	-51.37	2.39992G	-32.88	2.4G	-32.25	2.48694G	-49.11	17.65766G	-47.51	3
2422MHz	Pass	2.43202G	6.62	-23.38	2.30283G	-51.73	2.39984G	-32.89	2.4G	-30.89	2.4857G	-49.68	16.89201G	-47.38	4
2437MHz	Pass	2.43202G	6.62	-23.38	2.30025G	-51.57	2.39956G	-35.40	2.4G	-40.10	2.48498G	-45.05	17.6829G	-47.68	1
2437MHz	Pass	2.43202G	6.62	-23.38	2.30912G	-50.68	2.39956G	-36.00	2.4G	-39.35	2.48806G	-45.83	5.89252G	-47.98	2
2437MHz	Pass	2.43202G	6.62	-23.38	2.30254G	-50.64	2.39952G	-37.21	2.4G	-40.94	2.48418G	-46.13	17.64924G	-48.12	3
2437MHz	Pass	2.43202G	6.62	-23.38	2.30712G	-51.29	2.39956G	-38.73	2.4G	-41.25	2.48414G	-44.31	17.65485G	-47.12	4
2452MHz	Pass	2.43202G	6.62	-23.38	2.30655G	-51.54	2.39968G	-35.27	2.4G	-37.28	2.48954G	-39.21	6.77876G	-47.97	1
2452MHz	Pass	2.43202G	6.62	-23.38	2.30998G	-50.06	2.39952G	-34.18	2.4G	-37.48	2.48806G	-43.73	17.69972G	-47.03	2
2452MHz	Pass	2.43202G	6.62	-23.38	2.3034G	-51.35	2.39828G	-34.91	2.4G	-36.07	2.48574G	-40.93	6.75632G	-48.10	3
2452MHz	Pass	2.43202G	6.62	-23.38	2.30111G	-50.64	2.39952G	-33.84	2.4G	-37.66	2.4845G	-40.20	5.92337G	-48.44	4







802.11ax HEW40-BF_Nss1,(MCS0)_4TX

2452MHz

CSENdB

24/03/2022

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43202G	6.62	-23.38	2.30655G	-51.54	2.39968G	-35.27	2.4G	-37.28	2.48954G	-39.21	6.77876G	-47.97	1
2.43202G	6.62	-23.38	2.30998G	-50.06	2.39952G	-34.18	2.4G	-37.48	2.48806G	-43.73	17.69972G	-47.03	2
2.43202G	6.62	-23.38	2.3034G	-51.35	2.39828G	-34.91	2.4G	-36.07	2.48574G	-40.93	6.75632G	-48.10	3
2.43202G	6.62	-23.38	2.30111G	-50.64	2.39952G	-33.84	2.4G	-37.66	2.4845G	-40.20	5.92337G	-48.44	4

RBW (Hz)	100k
VBW (Hz)	300k
Detector	Peak



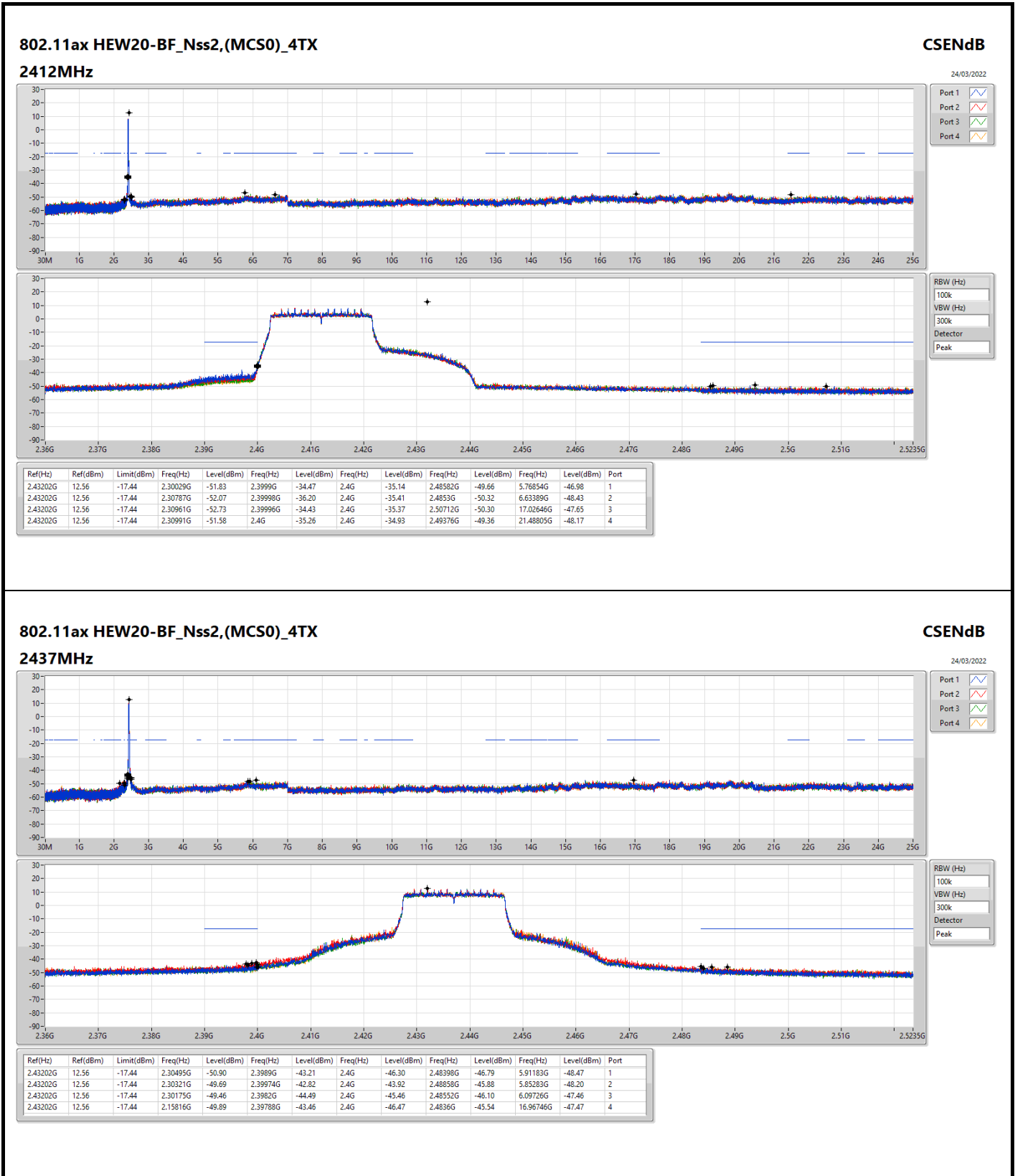
Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	Pass	2.43202G	12.56	-17.44	2.30961G	-52.73	2.39996G	-34.43	2.4G	-35.37	2.50712G	-50.30	17.02646G	-47.65	3



Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11ax HEW20-BF_Nss2(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43202G	12.56	-17.44	2.30029G	-51.83	2.3999G	-34.47	2.4G	-35.14	2.48582G	-49.66	5.76854G	-46.98	1
2412MHz	Pass	2.43202G	12.56	-17.44	2.30787G	-52.07	2.39998G	-36.20	2.4G	-35.41	2.4853G	-50.32	6.63389G	-48.43	2
2412MHz	Pass	2.43202G	12.56	-17.44	2.30961G	-52.73	2.39996G	-34.43	2.4G	-35.37	2.50712G	-50.30	17.02646G	-47.65	3
2412MHz	Pass	2.43202G	12.56	-17.44	2.30991G	-51.58	2.4G	-35.26	2.4G	-34.93	2.49376G	-49.36	21.48805G	-48.17	4
2437MHz	Pass	2.43202G	12.56	-17.44	2.30495G	-50.90	2.3989G	-43.21	2.4G	-46.30	2.48398G	-46.79	5.91183G	-48.47	1
2437MHz	Pass	2.43202G	12.56	-17.44	2.30321G	-49.69	2.39974G	-42.82	2.4G	-43.92	2.48858G	-45.88	5.85283G	-48.20	2
2437MHz	Pass	2.43202G	12.56	-17.44	2.30175G	-49.46	2.3982G	-44.49	2.4G	-45.46	2.48552G	-46.10	6.09726G	-47.46	3
2437MHz	Pass	2.43202G	12.56	-17.44	2.15816G	-49.89	2.39788G	-43.46	2.4G	-46.47	2.4836G	-45.54	16.96746G	-47.47	4
2462MHz	Pass	2.43202G	12.56	-17.44	2.3G	-51.49	2.3933G	-50.27	2.4835G	-46.67	2.48586G	-45.20	6.80527G	-47.94	1
2462MHz	Pass	2.43202G	12.56	-17.44	2.30991G	-51.75	2.39352G	-48.86	2.4835G	-47.19	2.48808G	-47.58	6.4316G	-47.19	2
2462MHz	Pass	2.43202G	12.56	-17.44	2.30991G	-52.29	2.39452G	-49.38	2.4835G	-47.08	2.48388G	-44.42	5.95398G	-47.86	3
2462MHz	Pass	2.43202G	12.56	-17.44	2.19719G	-51.57	2.39584G	-49.00	2.4835G	-47.62	2.48502G	-43.70	6.95699G	-47.95	4

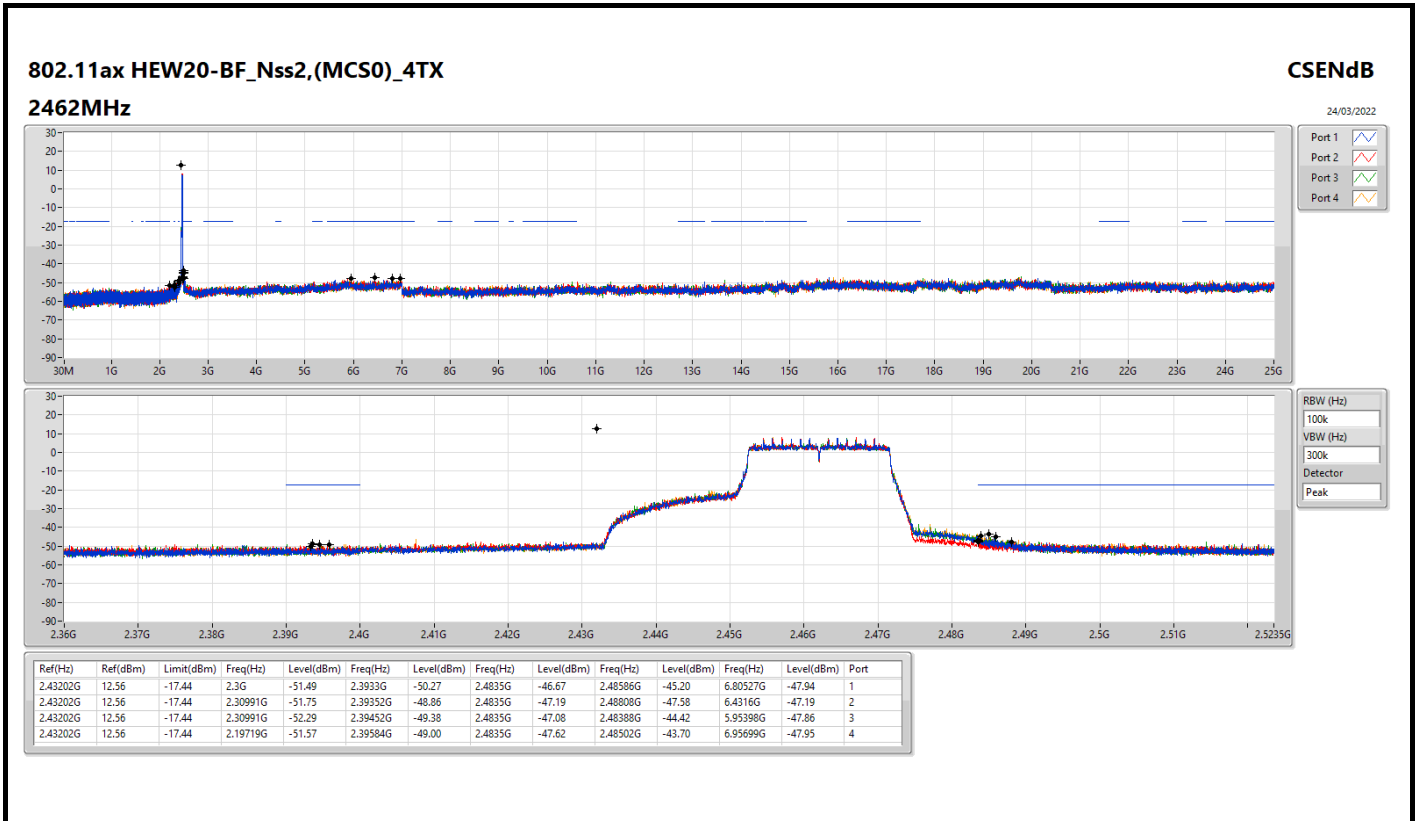


802.11ax HEW20-BF_Nss2,(MCS0)_4TX

2437MHz

CSENdB

24/03/2022

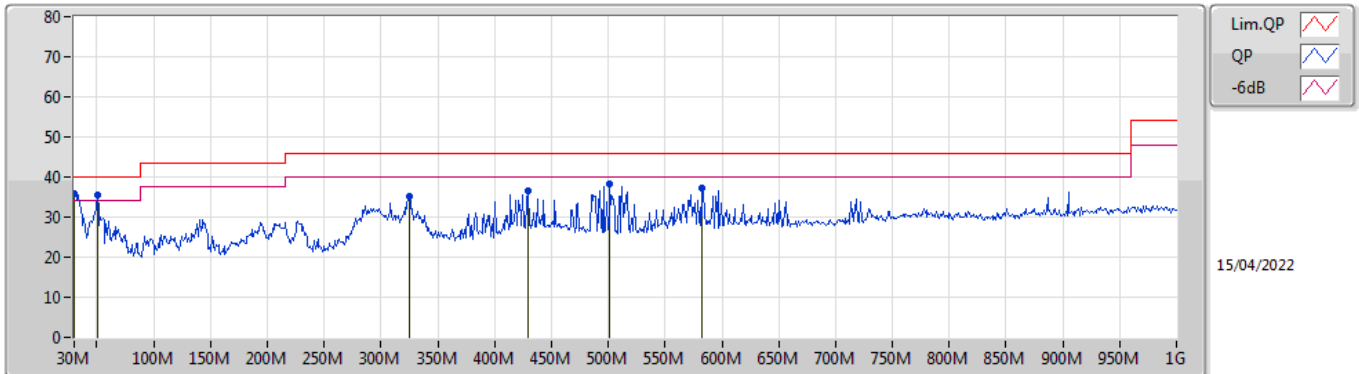




Summary

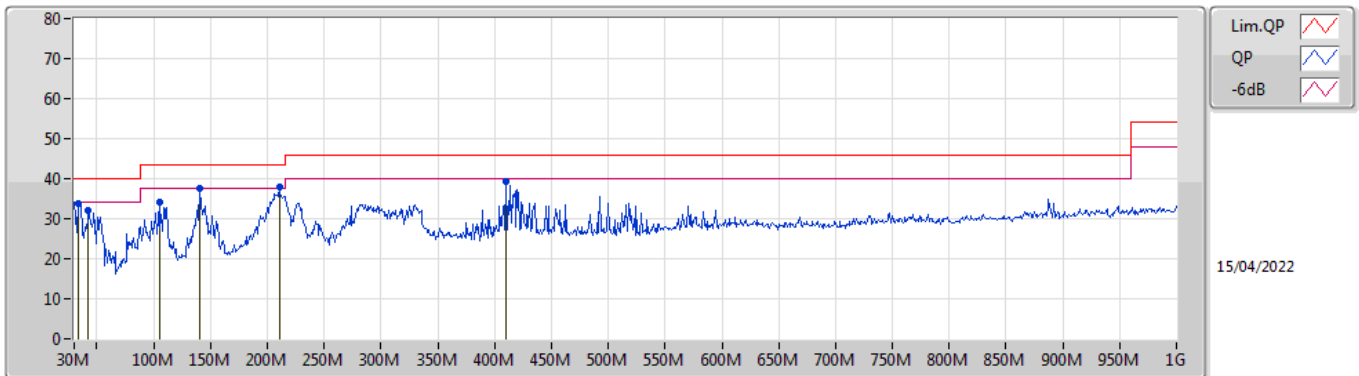
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 4	Pass	QP	30M	35.95	40.00	-4.05	Vertical

Mode 4



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
QP	30M	35.95	40.00	-4.05	-6.70	3	Vertical	209	1.00	"Worst"	42.65	23.99	0.80	31.49
PK	50.37M	35.43	40.00	-4.57	-16.74	3	Vertical	21	1.00	"	52.17	13.92	1.10	31.76
PK	324.88M	35.32	46.00	-10.68	-9.63	3	Vertical	154	1.00	-	44.95	19.61	2.85	32.09
PK	429.64M	36.57	46.00	-9.43	-6.61	3	Vertical	228	1.25	-	43.18	22.25	3.38	32.24
PK	501.42M	38.24	46.00	-7.76	-5.51	3	Vertical	75	1.25	-	43.75	23.21	3.61	32.33
PK	581.93M	37.22	46.00	-8.78	-4.20	3	Vertical	110	1.00	-	41.42	24.36	3.93	32.49

Mode 4



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	33.88M	33.87	40.00	-6.13	-8.71	3	Horizontal	204	1.25	-	42.58	21.98	0.88	31.57
PK	42.61M	32.07	40.00	-7.93	-13.51	3	Horizontal	182	2.00	-	45.58	17.23	0.95	31.69
PK	104.69M	34.18	43.50	-9.32	-13.12	3	Horizontal	285	3.00	-	47.30	17.25	1.52	31.89
PK	140.58M	37.46	43.50	-6.04	-13.25	3	Horizontal	274	1.50	-	50.71	16.90	1.81	31.96
PK	210.42M	38.04	43.50	-5.46	-14.84	3	Horizontal	347	1.25	"Worst"	52.88	14.89	2.26	31.99
PK	410M	39.17	46.00	-6.83	-6.97	3	Horizontal	74	1.00	-	46.14	21.98	3.26	32.21

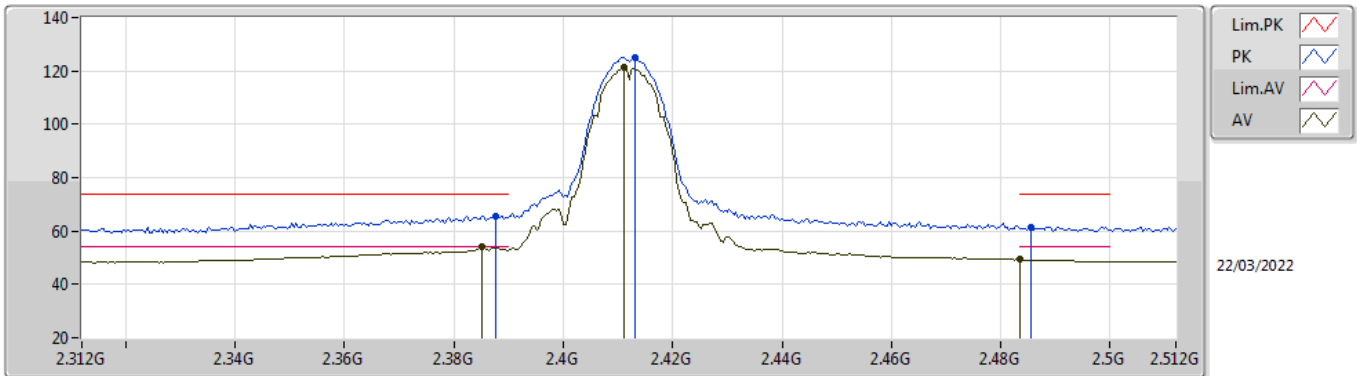


Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11g_Nss1_(6Mbps)_4TX	Pass	AV	2.4835G	53.95	54.00	-0.05	3	Vertical	312	1.80	-

802.11b_Nss1,(1Mbps)_4TX

2412MHz_TX

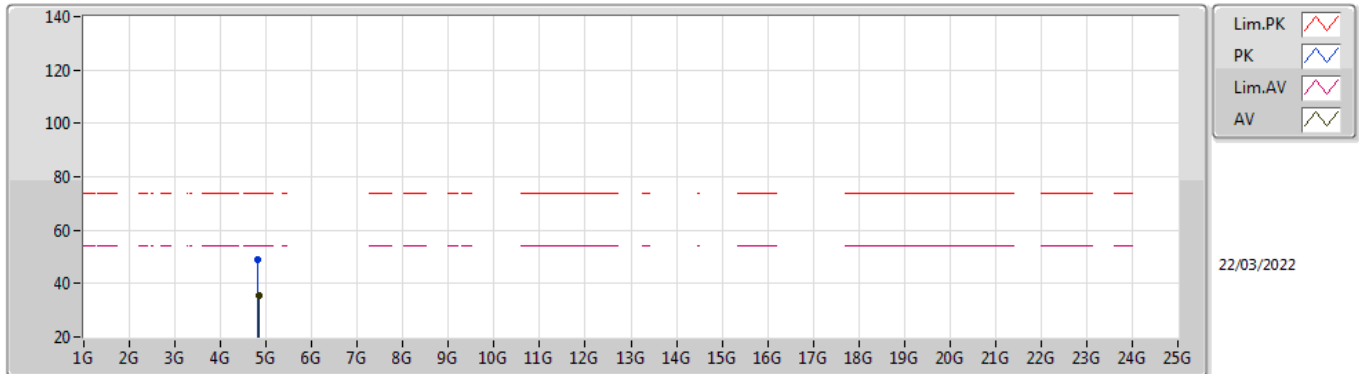


EUT_Z_4TX
Setting 99
06-I-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3876G	65.77	74.00	-8.23	34.38	3	Vertical	179	2.31	-	27.50	3.89	-
AV	2.3852G	53.93	54.00	-0.07	22.53	3	Vertical	179	2.31	-	27.52	3.88	-
PK	2.4132G	125.04	Inf	-Inf	93.79	3	Vertical	179	2.31	-	27.35	3.90	-
AV	2.4112G	121.15	Inf	-Inf	89.89	3	Vertical	179	2.31	-	27.36	3.90	-
PK	2.4856G	61.52	74.00	-12.48	30.34	3	Vertical	179	2.31	-	27.27	3.91	-
AV	2.4835G	49.27	54.00	-4.73	18.09	3	Vertical	179	2.31	-	27.27	3.91	-

802.11b_Nss1,(1Mbps)_4TX

2412MHz_TX

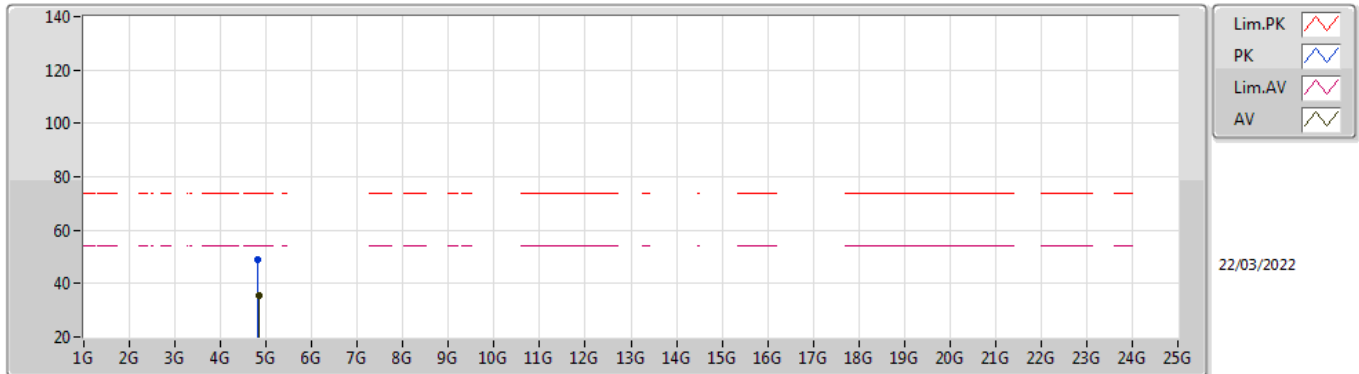


EUT_Z_4TX
Setting 99
06-I-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.81916G	48.82	74.00	-25.18	44.45	3	Vertical	87	1.36	-	31.06	5.37	32.06
AV	4.83068G	35.59	54.00	-18.41	31.23	3	Vertical	87	1.36	-	31.04	5.37	32.05

802.11b_Nss1,(1Mbps)_4TX

2412MHz_TX

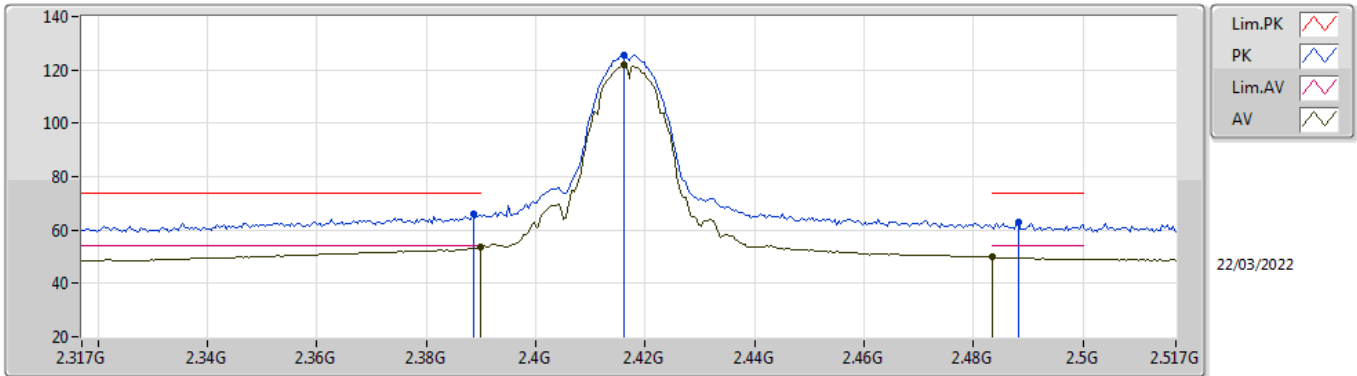


EUT_Z_4TX
Setting 99
06-I-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.81952G	49.02	74.00	-24.98	44.65	3	Horizontal	144	1.96	-	31.06	5.37	32.06
AV	4.83084G	35.57	54.00	-18.43	31.21	3	Horizontal	144	1.96	-	31.04	5.37	32.05

802.11b_Nss1,(1Mbps)_4TX

2417MHz_TX

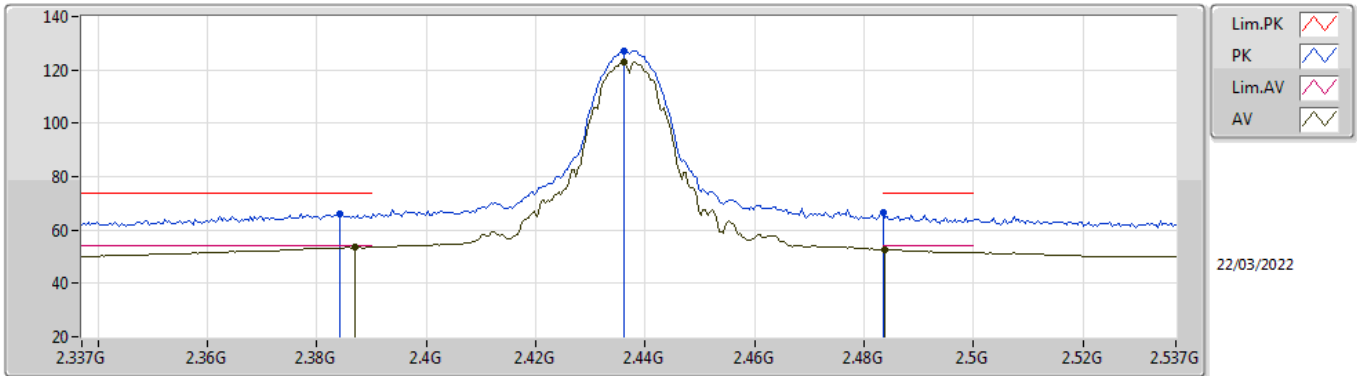


EUT_Z_4TX
Setting 100
06-F-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3886G	66.24	74.00	-7.76	34.86	3	Vertical	178	2.29	-	27.49	3.89	-
AV	2.3898G	53.80	54.00	-0.20	22.43	3	Vertical	178	2.29	-	27.48	3.89	-
PK	2.4162G	125.53	Inf	-Inf	94.29	3	Vertical	178	2.29	-	27.34	3.90	-
AV	2.4162G	121.70	Inf	-Inf	90.46	3	Vertical	178	2.29	-	27.34	3.90	-
PK	2.4882G	62.79	74.00	-11.21	31.60	3	Vertical	178	2.29	-	27.28	3.91	-
AV	2.4835G	49.83	54.00	-4.17	18.65	3	Vertical	178	2.29	-	27.27	3.91	-

802.11b_Nss1,(1Mbps)_4TX

2437MHz_TX

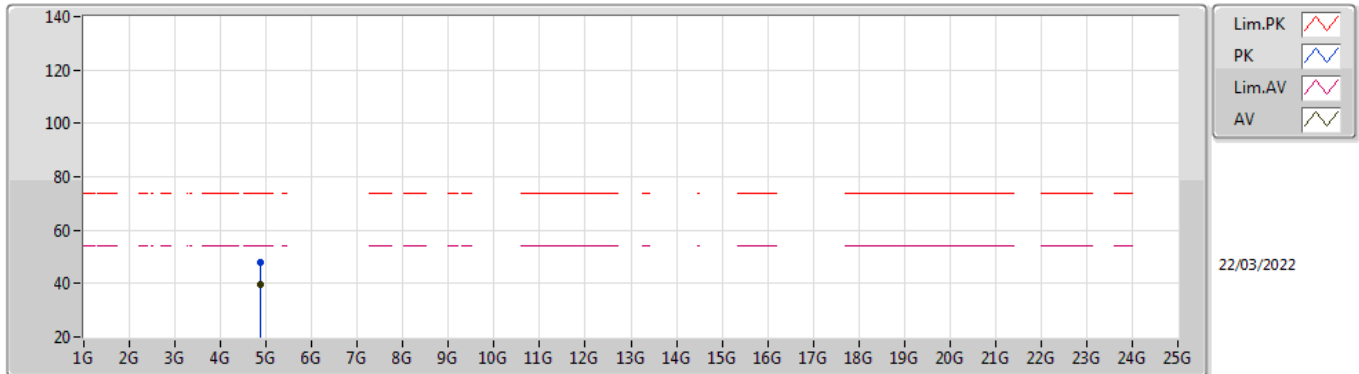


EUT_Z_4TX
Setting 100
06-R-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3842G	65.85	74.00	-8.15	34.44	3	Vertical	177	2.51	-	27.53	3.88	-
AV	2.387G	53.45	54.00	-0.55	22.07	3	Vertical	177	2.51	-	27.50	3.88	-
PK	2.4362G	127.23	Inf	-Inf	96.06	3	Vertical	177	2.51	-	27.26	3.91	-
AV	2.4362G	123.18	Inf	-Inf	92.01	3	Vertical	177	2.51	-	27.26	3.91	-
PK	2.4835G	66.46	74.00	-7.54	35.28	3	Vertical	177	2.51	-	27.27	3.91	-
AV	2.4838G	52.57	54.00	-1.43	21.39	3	Vertical	177	2.51	-	27.27	3.91	-

802.11b_Nss1,(1Mbps)_4TX

2437MHz_TX

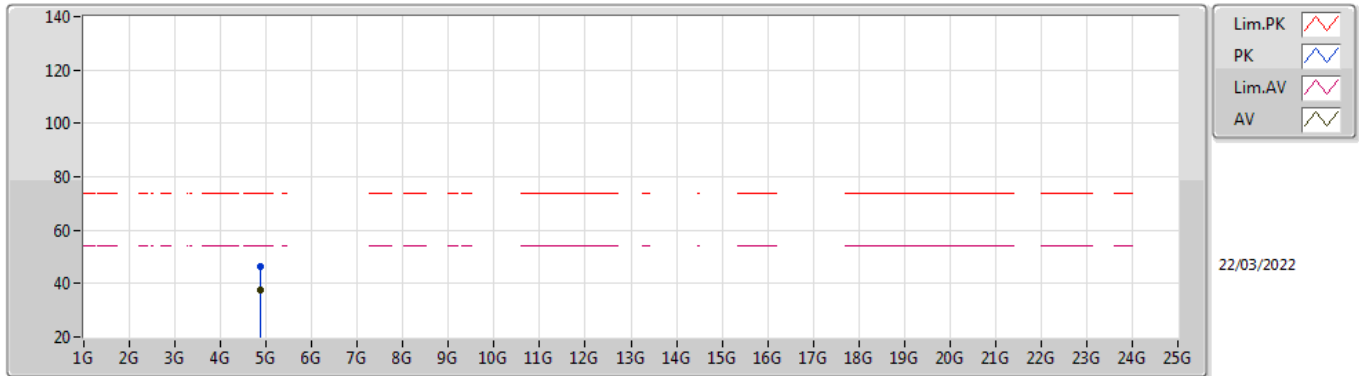


EUT_Z_4TX
Setting 100
06-R-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.874G	47.71	74.00	-26.29	43.29	3	Vertical	0	1.80	-	31.05	5.39	32.02
AV	4.87408G	39.91	54.00	-14.09	35.49	3	Vertical	0	1.80	-	31.05	5.39	32.02

802.11b_Nss1,(1Mbps)_4TX

2437MHz_TX

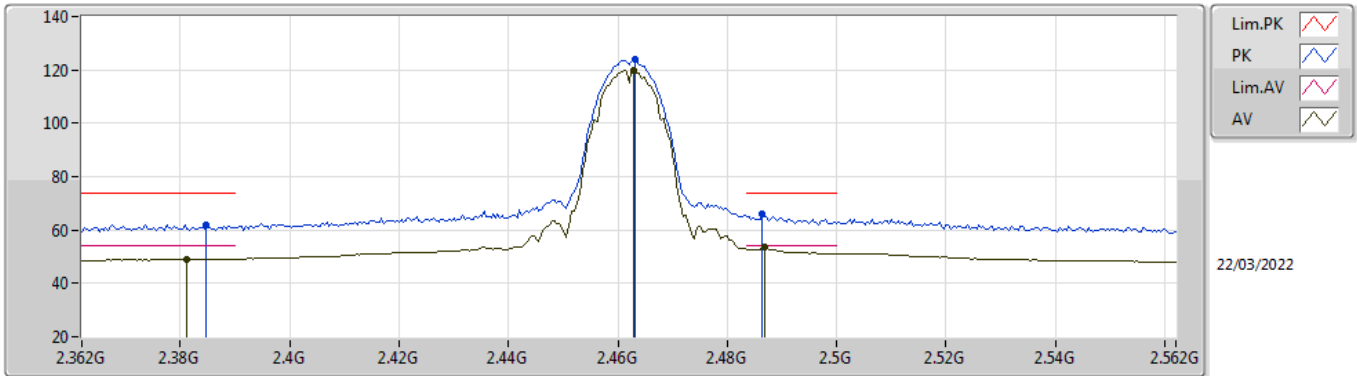


EUT_Z_4TX
Setting 100
06-R-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87408G	46.30	74.00	-27.70	41.88	3	Horizontal	62	1.23	-	31.05	5.39	32.02
AV	4.87404G	37.52	54.00	-16.48	33.10	3	Horizontal	62	1.23	-	31.05	5.39	32.02

802.11b_Nss1,(1Mbps)_4TX

2462MHz_TX

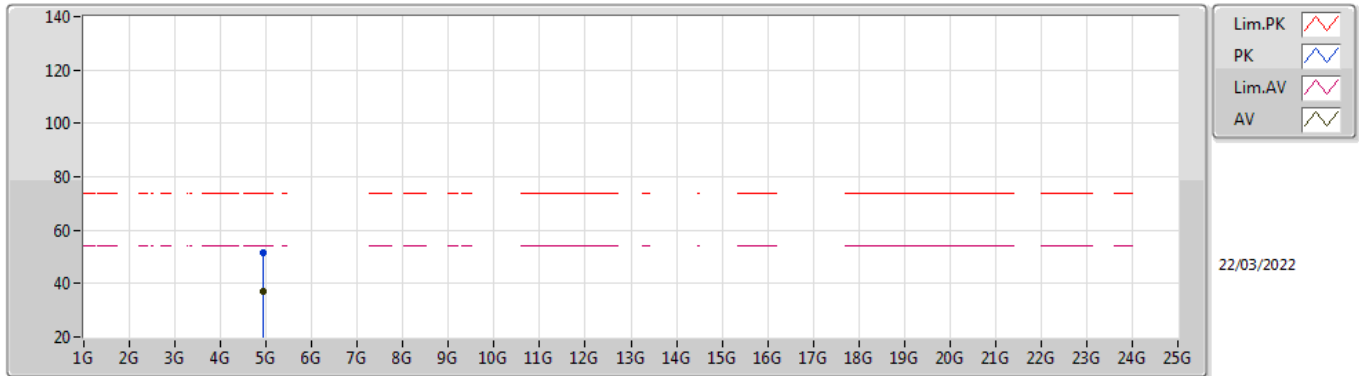


EUT_Z_4TX
Setting 92
06-I-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3848G	61.98	74.00	-12.02	30.58	3	Vertical	176	2.46	-	27.52	3.88	-
AV	2.3812G	49.22	54.00	-4.78	17.79	3	Vertical	176	2.46	-	27.55	3.88	-
PK	2.4632G	123.71	Inf	-Inf	92.57	3	Vertical	176	2.46	-	27.23	3.91	-
AV	2.4628G	119.60	Inf	-Inf	88.46	3	Vertical	176	2.46	-	27.23	3.91	-
PK	2.4864G	66.14	74.00	-7.86	34.96	3	Vertical	176	2.46	-	27.27	3.91	-
AV	2.4868G	53.69	54.00	-0.31	22.51	3	Vertical	176	2.46	-	27.27	3.91	-

802.11b_Nss1,(1Mbps)_4TX

2462MHz_TX

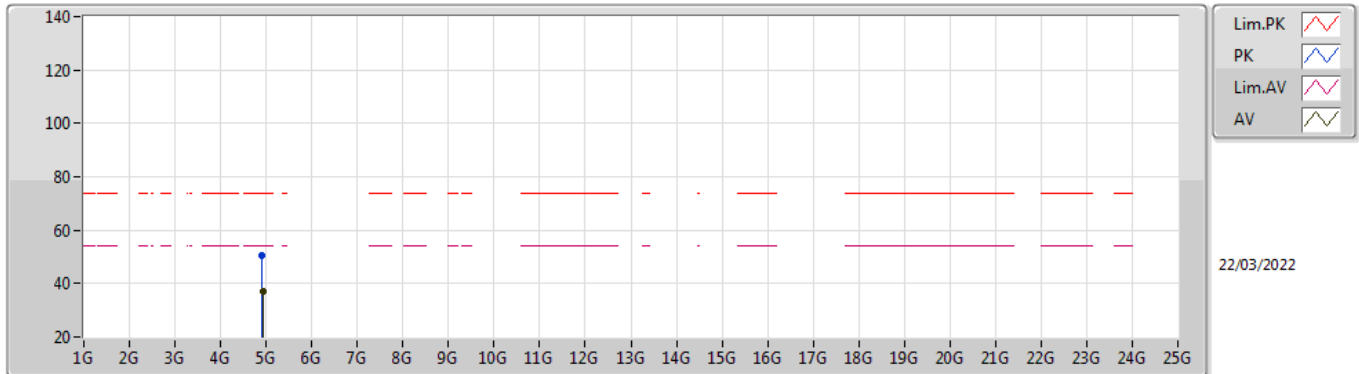


EUT_Z_4TX
Setting 92
06-I-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.9334G	51.58	74.00	-22.42	46.91	3	Vertical	4	1.78	-	31.23	5.41	31.97
AV	4.92664G	36.87	54.00	-17.13	32.23	3	Vertical	4	1.78	-	31.21	5.40	31.97

802.11b_Nss1,(1Mbps)_4TX

2462MHz_TX

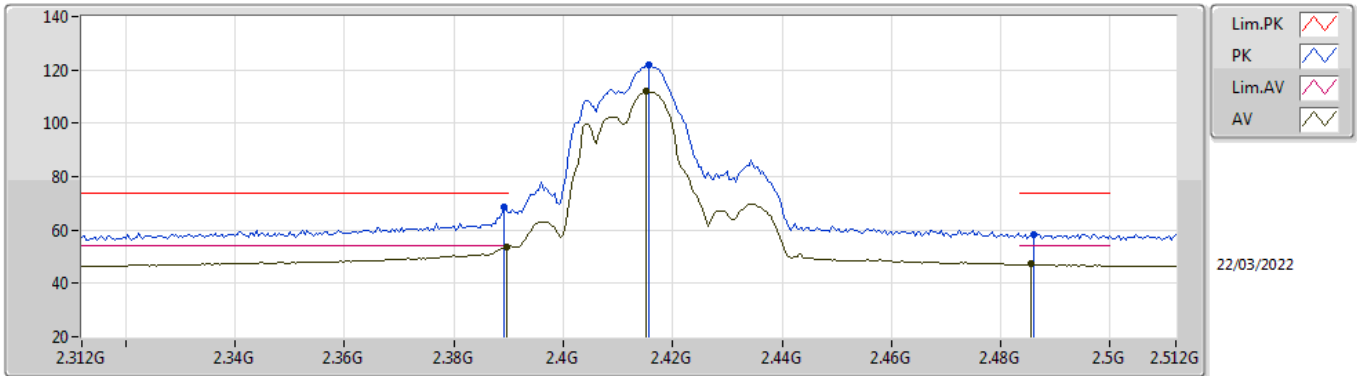


EUT Z_4TX
Setting 92
06-I-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.91928G	50.51	74.00	-23.49	45.91	3	Horizontal	151	2.09	-	31.18	5.40	31.98
AV	4.92344G	36.85	54.00	-17.15	32.23	3	Horizontal	151	2.09	-	31.19	5.40	31.97

802.11g_Nss1,(6Mbps)_4TX

2412MHz_TX

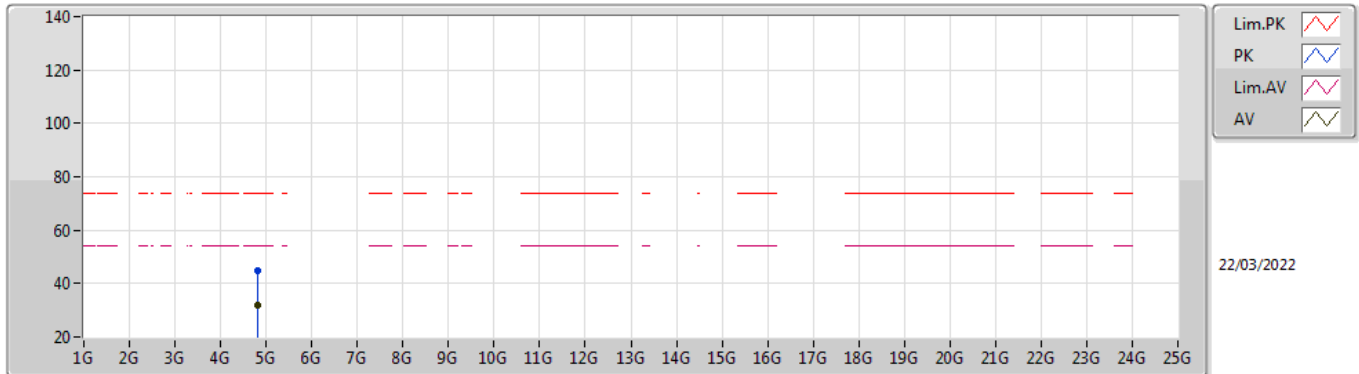


EUT_Z_4TX
Setting 82
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3892G	68.53	74.00	-5.47	37.15	3	Vertical	309	2.06	-	27.49	3.89	-
AV	2.3896G	53.81	54.00	-0.19	22.44	3	Vertical	309	2.06	-	27.48	3.89	-
PK	2.4156G	121.95	Inf	-Inf	90.71	3	Vertical	309	2.06	-	27.34	3.90	-
AV	2.4152G	111.82	Inf	-Inf	80.58	3	Vertical	309	2.06	-	27.34	3.90	-
PK	2.486G	58.53	74.00	-15.47	27.35	3	Vertical	309	2.06	-	27.27	3.91	-
AV	2.4856G	47.16	54.00	-6.84	15.98	3	Vertical	309	2.06	-	27.27	3.91	-

802.11g_Nss1,(6Mbps)_4TX

2412MHz_TX

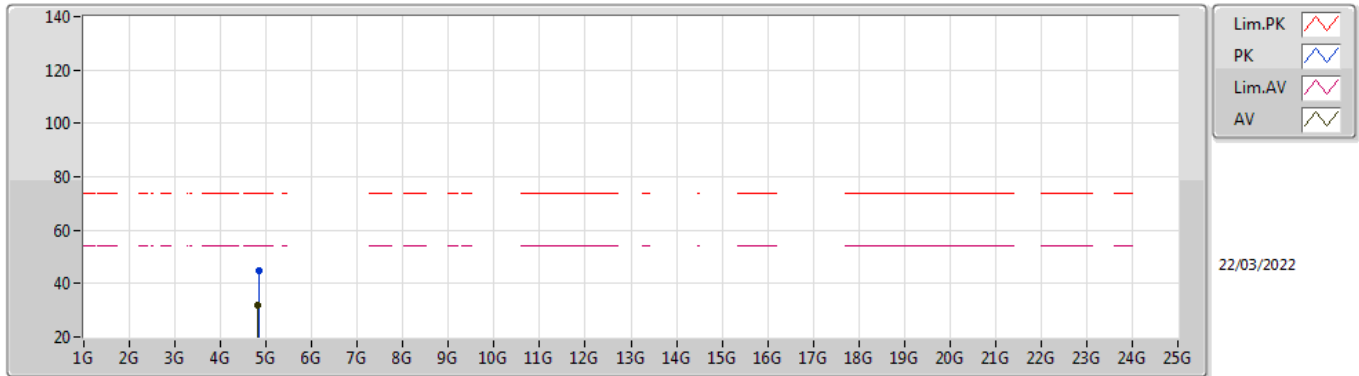


EUT Z_4TX
Setting 82
06-F-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.81368G	44.98	74.00	-29.02	40.62	3	Vertical	108	1.80	-	31.07	5.36	32.07
AV	4.80912G	31.87	54.00	-22.13	27.50	3	Vertical	108	1.80	-	31.08	5.36	32.07

802.11g_Nss1,(6Mbps)_4TX

2412MHz_TX

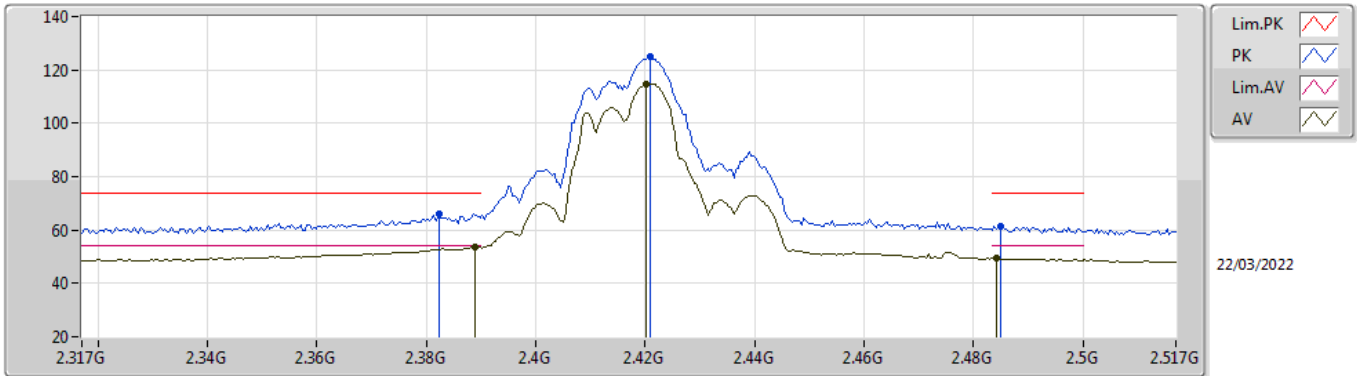


EUT Z_4TX
Setting 82
06-F-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.83882G	44.57	74.00	-29.43	40.23	3	Horizontal	284	1.32	-	31.02	5.37	32.05
AV	4.824G	31.72	54.00	-22.28	27.36	3	Horizontal	284	1.32	-	31.05	5.37	32.06

802.11g_Nss1,(6Mbps)_4TX

2417MHz_TX

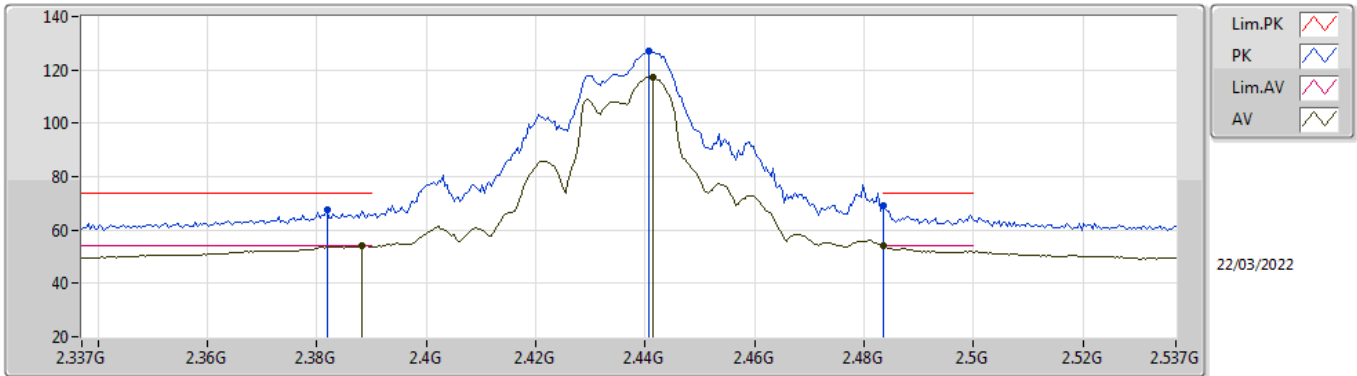


EUT_Z_4TX
Setting 94
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3822G	65.98	74.00	-8.02	34.56	3	Vertical	309	1.97	-	27.54	3.88	-
AV	2.389G	53.82	54.00	-0.18	22.44	3	Vertical	309	1.97	-	27.49	3.89	-
PK	2.421G	124.75	Inf	-Inf	93.53	3	Vertical	309	1.97	-	27.32	3.90	-
AV	2.4202G	114.83	Inf	-Inf	83.61	3	Vertical	309	1.97	-	27.32	3.90	-
PK	2.485G	61.55	74.00	-12.45	30.37	3	Vertical	309	1.97	-	27.27	3.91	-
AV	2.4842G	49.36	54.00	-4.64	18.18	3	Vertical	309	1.97	-	27.27	3.91	-

802.11g_Nss1,(6Mbps)_4TX

2437MHz_TX

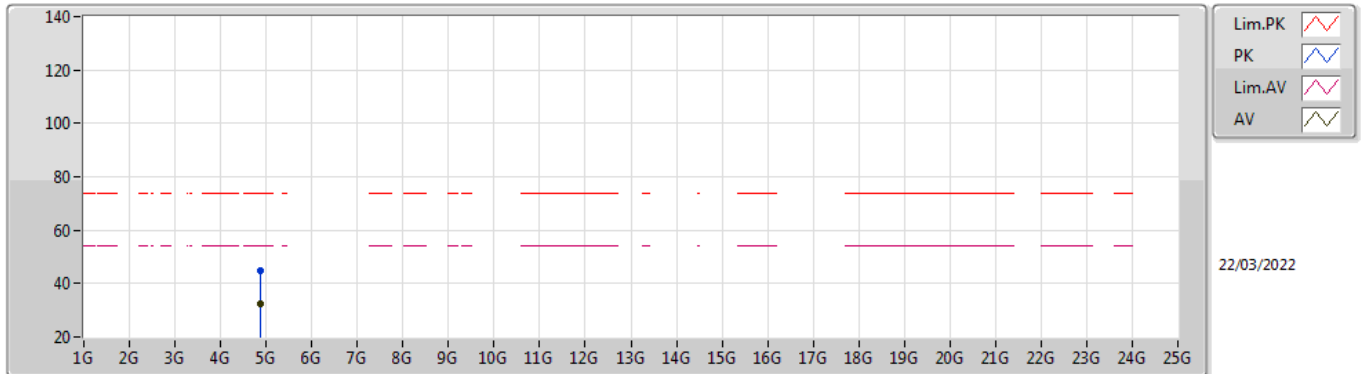


EUT_Z_4TX
Setting 100
06-R-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3818G	67.54	74.00	-6.46	36.11	3	Vertical	312	1.80	-	27.55	3.88	-
AV	2.3882G	53.91	54.00	-0.09	22.53	3	Vertical	312	1.80	-	27.49	3.89	-
PK	2.4406G	126.86	Inf	-Inf	95.71	3	Vertical	312	1.80	-	27.24	3.91	-
AV	2.4414G	117.25	Inf	-Inf	86.11	3	Vertical	312	1.80	-	27.23	3.91	-
PK	2.4835G	69.26	74.00	-4.74	38.08	3	Vertical	312	1.80	-	27.27	3.91	-
AV	2.4835G	53.95	54.00	-0.05	22.77	3	Vertical	312	1.80	-	27.27	3.91	-

802.11g_Nss1,(6Mbps)_4TX

2437MHz_TX

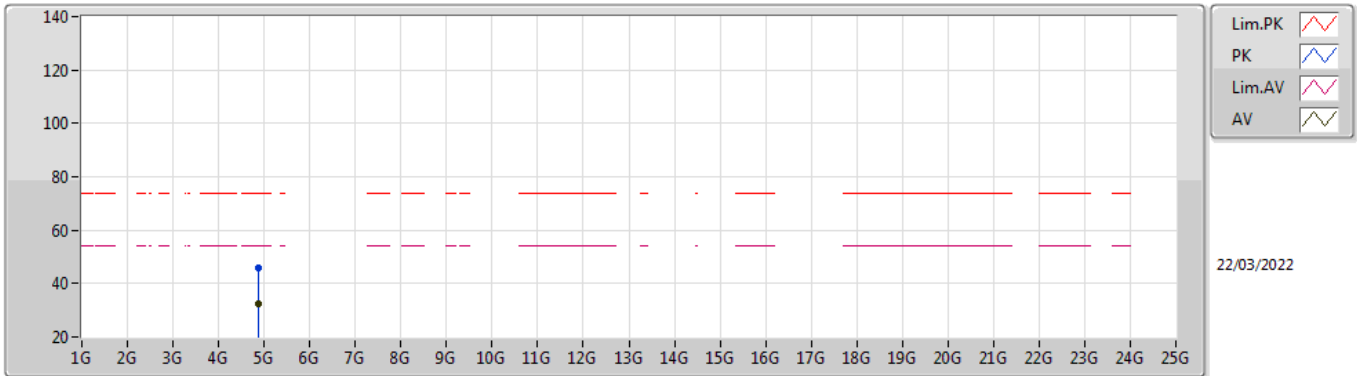


EUT Z_4TX
Setting 100
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87568G	44.83	74.00	-29.17	40.40	3	Vertical	330	1.88	-	31.05	5.39	32.01
AV	4.87472G	32.42	54.00	-21.58	28.00	3	Vertical	330	1.88	-	31.05	5.39	32.02

802.11g_Nss1,(6Mbps)_4TX

2437MHz_TX

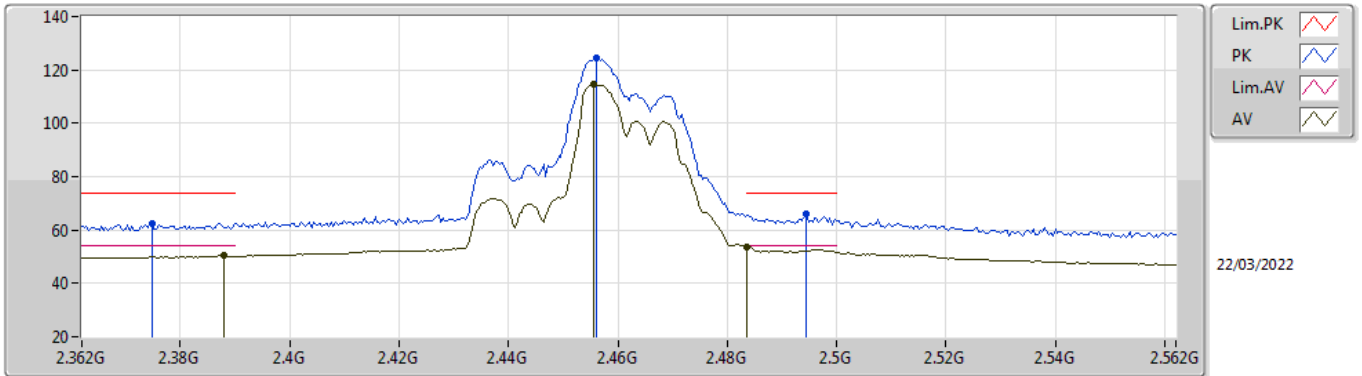


EUT Z_4TX
Setting 100
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87512G	45.93	74.00	-28.07	41.50	3	Horizontal	324	2.03	-	31.05	5.39	32.01
AV	4.87236G	32.41	54.00	-21.59	28.00	3	Horizontal	324	2.03	-	31.04	5.39	32.02

802.11g_Nss1,(6Mbps)_4TX

2462MHz_TX

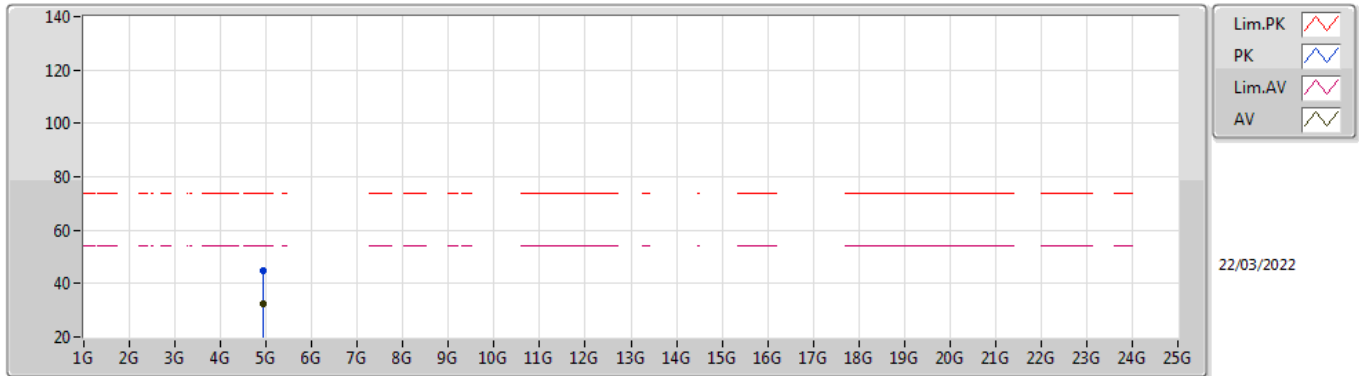


EUT_Z_4TX
Setting 94
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3748G	62.47	74.00	-11.53	31.00	3	Vertical	263	2.40	-	27.60	3.87	-
AV	2.388G	50.37	54.00	-3.63	18.98	3	Vertical	263	2.40	-	27.50	3.89	-
PK	2.456G	124.36	Inf	-Inf	93.24	3	Vertical	263	2.40	-	27.21	3.91	-
AV	2.4556G	114.41	Inf	-Inf	83.29	3	Vertical	263	2.40	-	27.21	3.91	-
PK	2.4944G	65.99	74.00	-8.01	34.79	3	Vertical	263	2.40	-	27.29	3.91	-
AV	2.4835G	53.81	54.00	-0.19	22.63	3	Vertical	263	2.40	-	27.27	3.91	-

802.11g_Nss1,(6Mbps)_4TX

2462MHz_TX

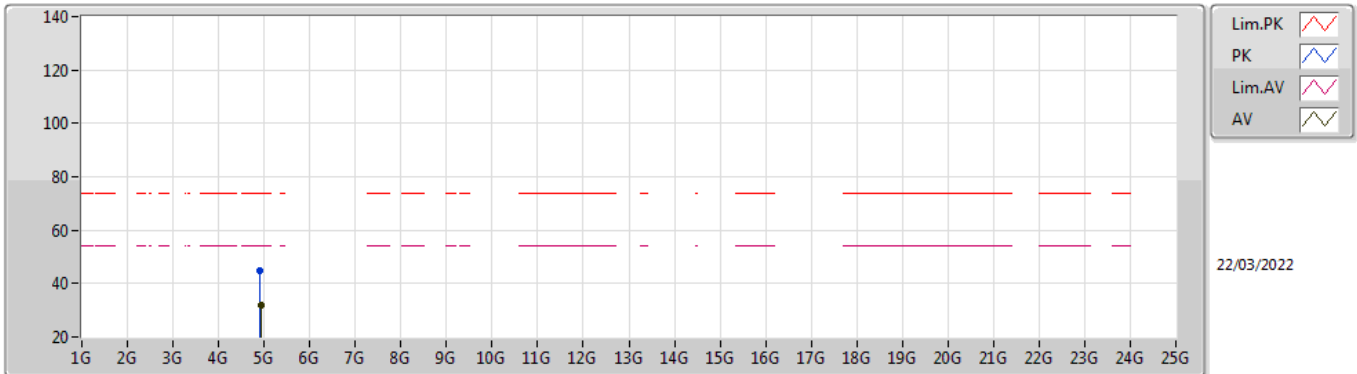


EUT Z_4TX
Setting 94
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.93642G	44.82	74.00	-29.18	40.12	3	Vertical	-0	1.80	-	31.25	5.41	31.96
AV	4.9225G	32.23	54.00	-21.77	27.62	3	Vertical	-0	1.80	-	31.19	5.40	31.98

802.11g_Nss1,(6Mbps)_4TX

2462MHz_TX



EUT_Z_4TX
Setting 94
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.91494G	44.72	74.00	-29.28	40.14	3	Horizontal	56	1.80	-	31.16	5.40	31.98
AV	4.92262G	31.70	54.00	-22.30	27.08	3	Horizontal	56	1.80	-	31.19	5.40	31.97

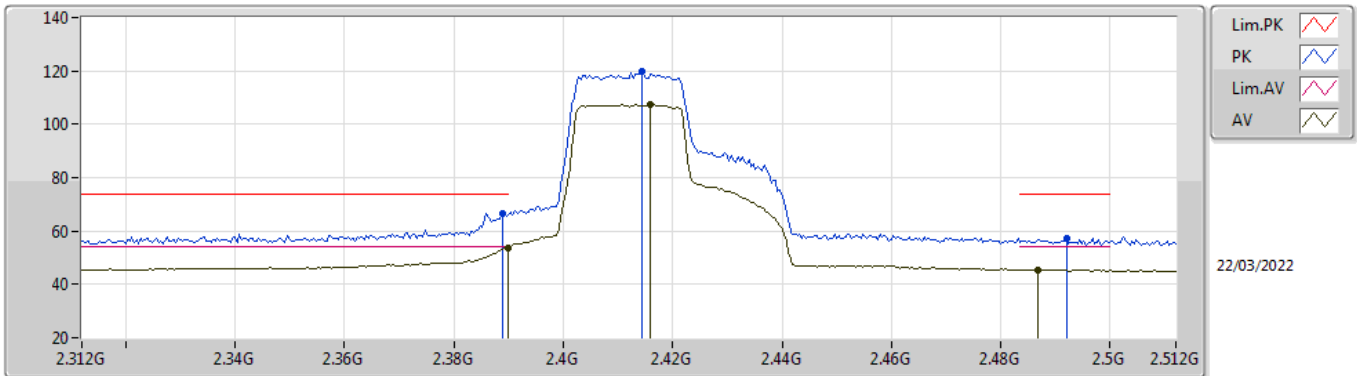


Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	Pass	AV	2.4835G	53.91	54.00	-0.09	3	Vertical	213.4	1.80	-

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

2412MHz_TX

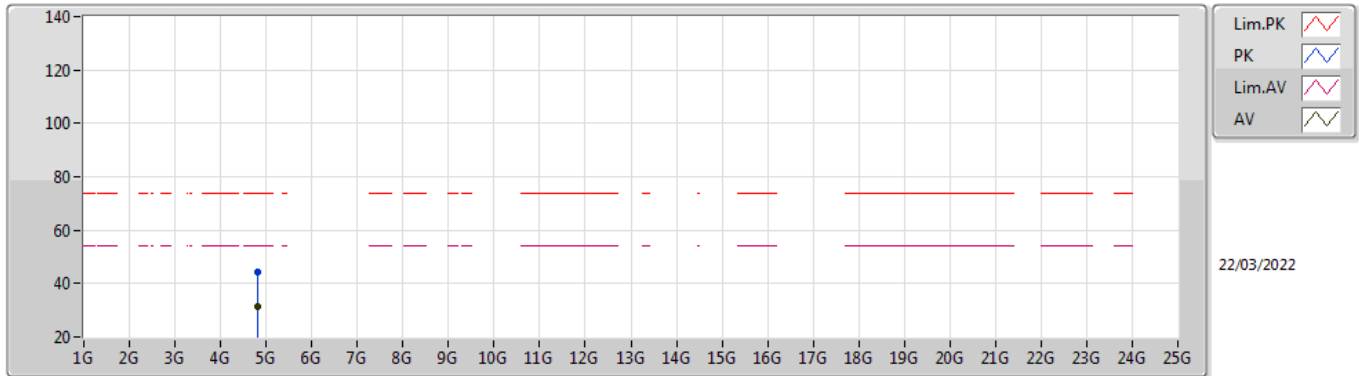


EUT_Z_4TX
Setting 70
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3888G	66.39	74.00	-7.61	35.01	3	Vertical	265.6	1.38	-	27.49	3.89	-
AV	2.39G	53.83	54.00	-0.17	22.46	3	Vertical	265.6	1.38	-	27.48	3.89	-
PK	2.4144G	119.66	Inf	-Inf	88.42	3	Vertical	265.6	1.38	-	27.34	3.90	-
AV	2.416G	107.29	Inf	-Inf	76.05	3	Vertical	265.6	1.38	-	27.34	3.90	-
PK	2.492G	57.22	74.00	-16.78	26.03	3	Vertical	265.6	1.38	-	27.28	3.91	-
AV	2.4868G	45.54	54.00	-8.46	14.36	3	Vertical	265.6	1.38	-	27.27	3.91	-

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

2412MHz_TX

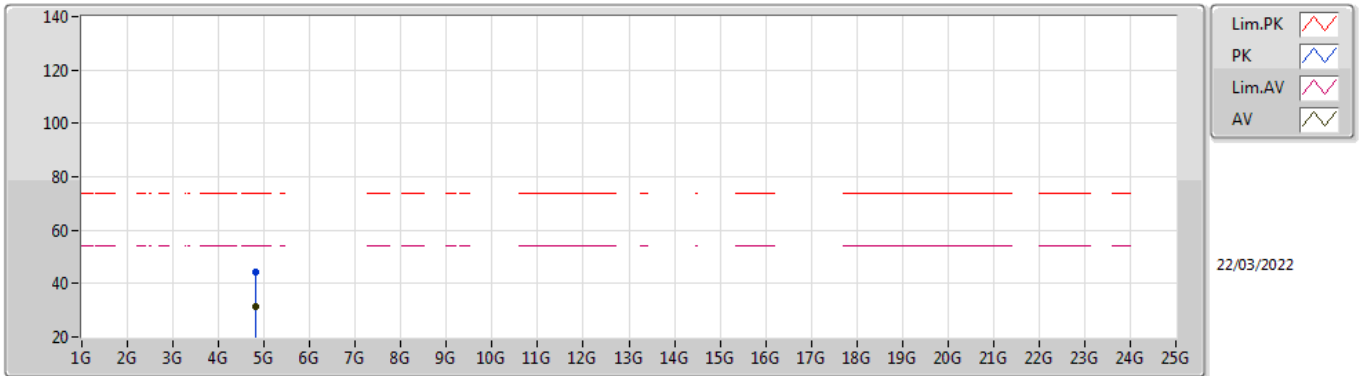


EUT_Z_4TX
Setting 70
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82196G	44.56	74.00	-29.44	40.19	3	Vertical	60	1.68	-	31.06	5.37	32.06
AV	4.82202G	31.31	54.00	-22.69	26.94	3	Vertical	60	1.68	-	31.06	5.37	32.06

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

2412MHz_TX

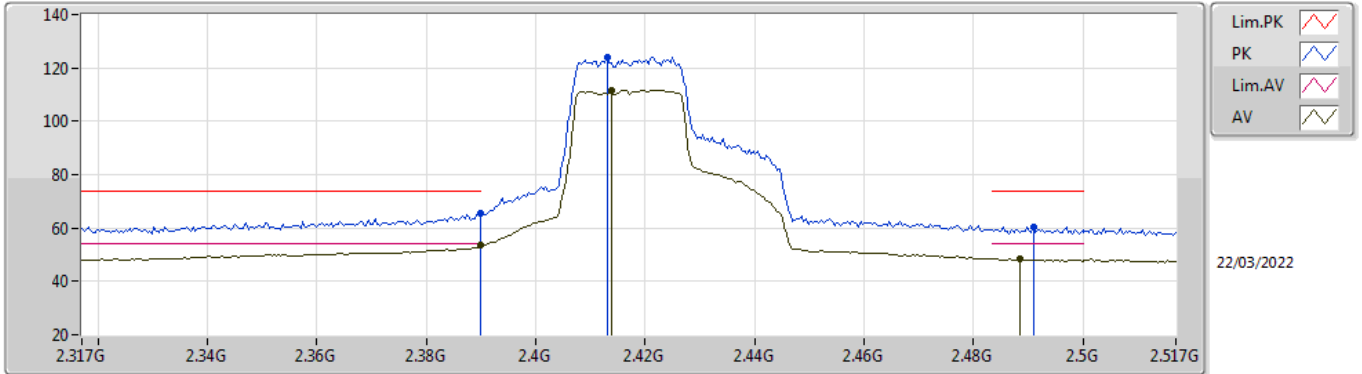


EUT_Z_4TX
Setting 70
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82698G	44.25	74.00	-29.75	39.89	3	Horizontal	339	1.65	-	31.05	5.37	32.06
AV	4.821G	31.33	54.00	-22.67	26.96	3	Horizontal	339	1.65	-	31.06	5.37	32.06

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

2417MHz_TX

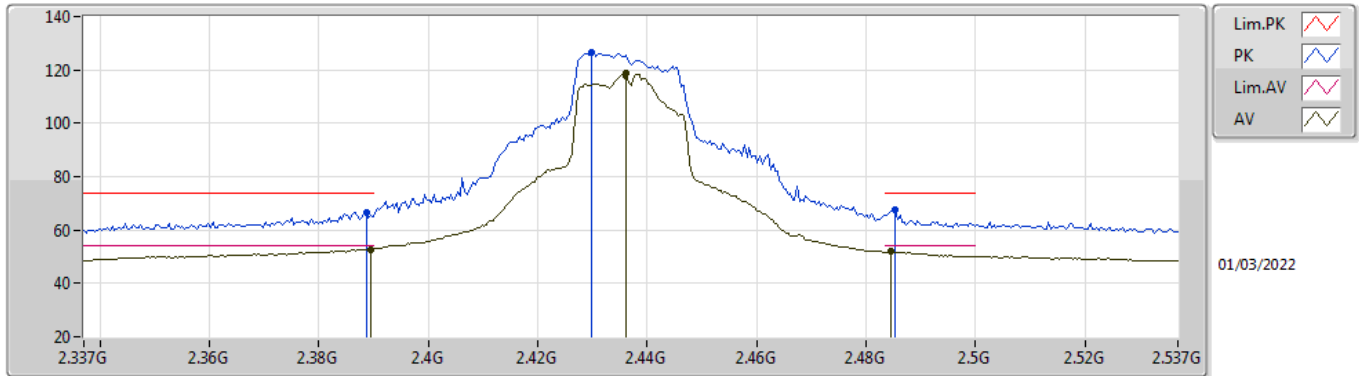


EUT_Z_4TX
Setting 91
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3898G	65.59	74.00	-8.41	34.22	3	Vertical	198.9	2.70	-	27.48	3.89	-
AV	2.3898G	53.80	54.00	-0.20	22.43	3	Vertical	198.9	2.70	-	27.48	3.89	-
PK	2.413G	124.05	Inf	-Inf	92.80	3	Vertical	198.9	2.70	-	27.35	3.90	-
AV	2.4138G	111.60	Inf	-Inf	80.36	3	Vertical	198.9	2.70	-	27.34	3.90	-
PK	2.491G	60.47	74.00	-13.53	29.28	3	Vertical	198.9	2.70	-	27.28	3.91	-
AV	2.4886G	48.54	54.00	-5.46	17.35	3	Vertical	198.9	2.70	-	27.28	3.91	-

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

2437MHz_TX

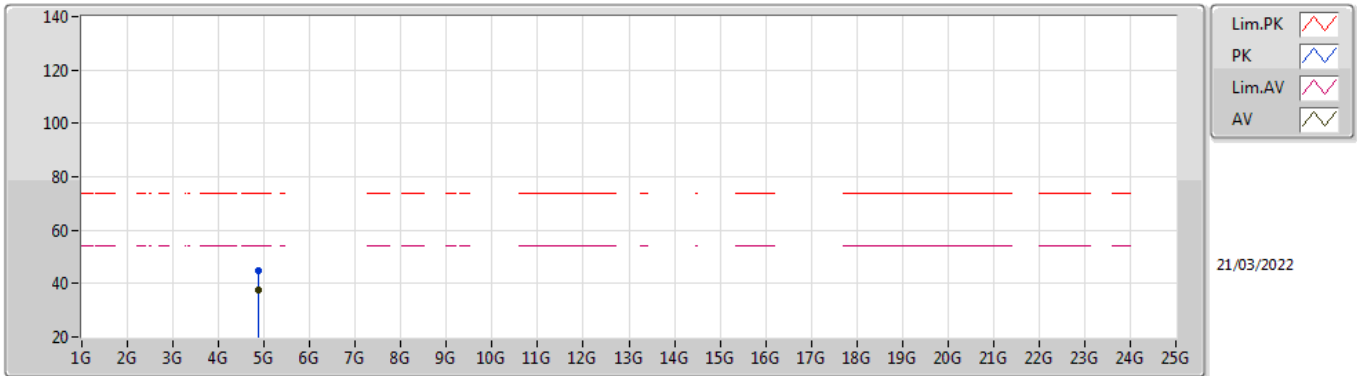


EUT_Z_4TX
Setting 100
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3886G	66.55	74.00	-7.45	35.17	3	Vertical	253.6	1.80	-	27.49	3.89	-
AV	2.3894G	52.81	54.00	-1.19	21.44	3	Vertical	253.6	1.80	-	27.48	3.89	-
PK	2.4298G	126.69	Inf	-Inf	95.51	3	Vertical	253.6	1.80	-	27.28	3.90	-
AV	2.4362G	118.76	Inf	-Inf	87.59	3	Vertical	253.6	1.80	-	27.26	3.91	-
PK	2.4854G	67.50	74.00	-6.50	36.32	3	Vertical	253.6	1.80	-	27.27	3.91	-
AV	2.4846G	51.89	54.00	-2.11	20.71	3	Vertical	253.6	1.80	-	27.27	3.91	-

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

2437MHz_TX

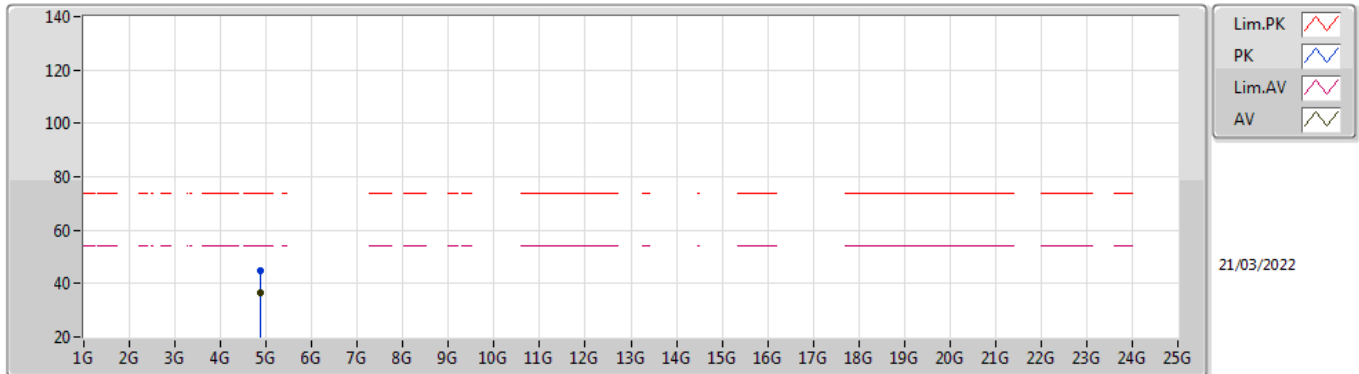


EUT Z_4TX
Setting 100
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.8804G	44.65	74.00	-29.35	40.21	3	Vertical	0	1.80	-	31.06	5.39	32.01
AV	4.87404G	37.61	54.00	-16.39	33.19	3	Vertical	0	1.80	-	31.05	5.39	32.02

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

2437MHz_TX

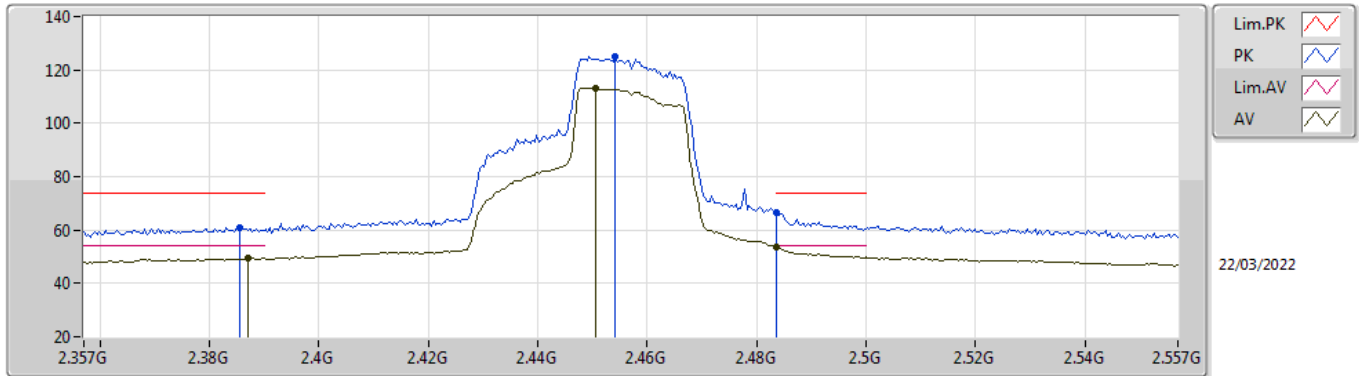


EUT Z_4TX
Setting 100
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.86932G	44.81	74.00	-29.19	40.41	3	Horizontal	289	2.34	-	31.04	5.38	32.02
AV	4.87392G	36.75	54.00	-17.25	32.33	3	Horizontal	289	2.34	-	31.05	5.39	32.02

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

2457MHz_TX

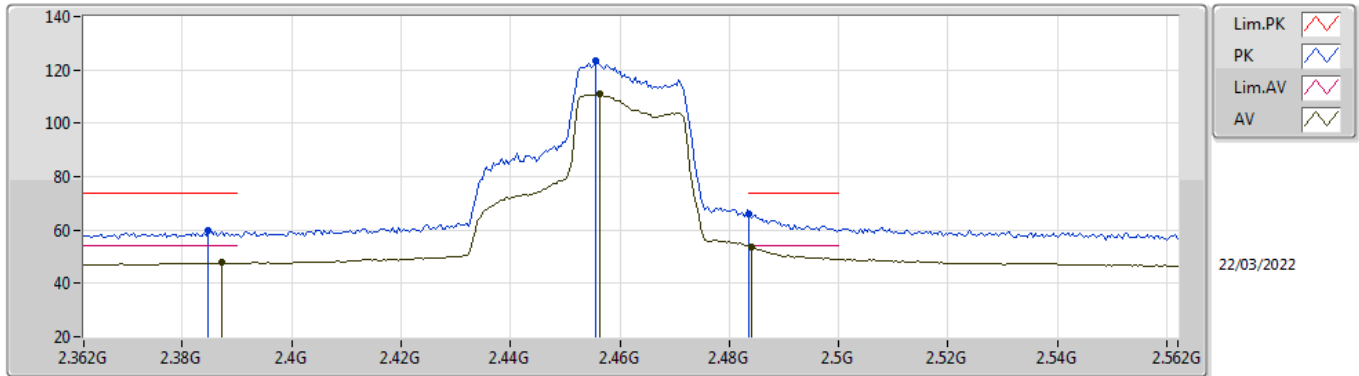


EUT_Z_4TX
Setting 89
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3854G	60.82	74.00	-13.18	29.42	3	Vertical	170.3	1.80	-	27.52	3.88	-
AV	2.387G	49.31	54.00	-4.69	17.93	3	Vertical	170.3	1.80	-	27.50	3.88	-
PK	2.4542G	124.83	Inf	-Inf	93.71	3	Vertical	170.3	1.80	-	27.21	3.91	-
AV	2.4506G	113.24	Inf	-Inf	82.13	3	Vertical	170.3	1.80	-	27.20	3.91	-
PK	2.4835G	66.66	74.00	-7.34	35.48	3	Vertical	170.3	1.80	-	27.27	3.91	-
AV	2.4835G	53.83	54.00	-0.17	22.65	3	Vertical	170.3	1.80	-	27.27	3.91	-

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

2462MHz_TX

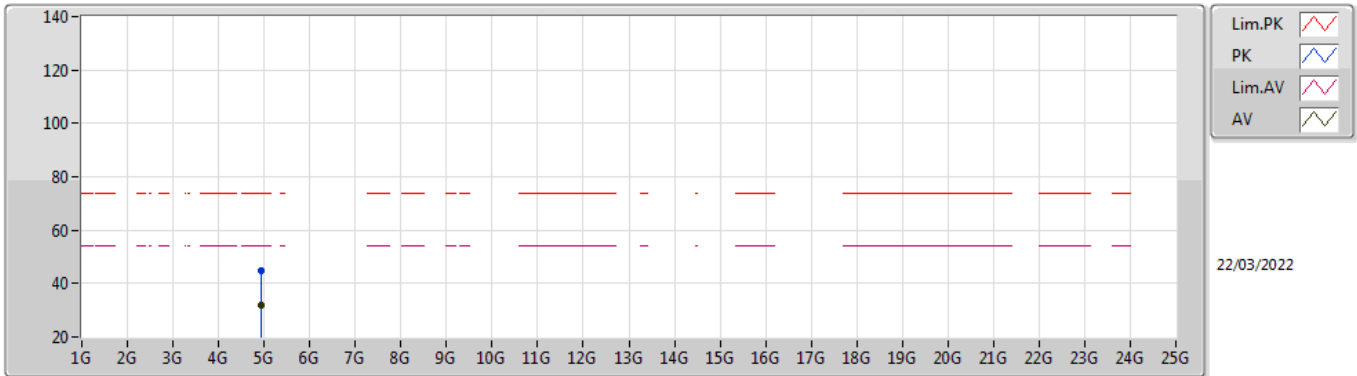


EUT_Z_4TX
Setting 83
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3848G	59.62	74.00	-14.38	28.22	3	Vertical	213.8	1.95	-	27.52	3.88	-
AV	2.3872G	47.68	54.00	-6.32	16.30	3	Vertical	213.8	1.95	-	27.50	3.88	-
PK	2.4556G	123.35	Inf	-Inf	92.23	3	Vertical	213.8	1.95	-	27.21	3.91	-
AV	2.4564G	110.84	Inf	-Inf	79.72	3	Vertical	213.8	1.95	-	27.21	3.91	-
PK	2.4835G	65.80	74.00	-8.20	34.62	3	Vertical	213.8	1.95	-	27.27	3.91	-
AV	2.484G	53.79	54.00	-0.21	22.61	3	Vertical	213.8	1.95	-	27.27	3.91	-

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

2462MHz_TX

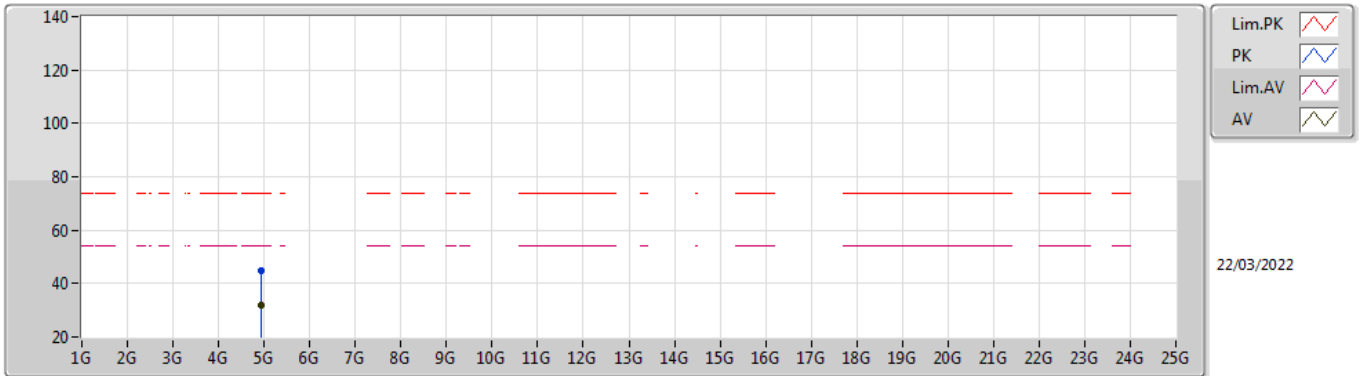


EUT Z_4TX
Setting 83
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92688G	44.64	74.00	-29.36	40.00	3	Vertical	309	1.79	-	31.21	5.40	31.97
AV	4.923G	31.73	54.00	-22.27	27.11	3	Vertical	309	1.79	-	31.19	5.40	31.97

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

2462MHz_TX

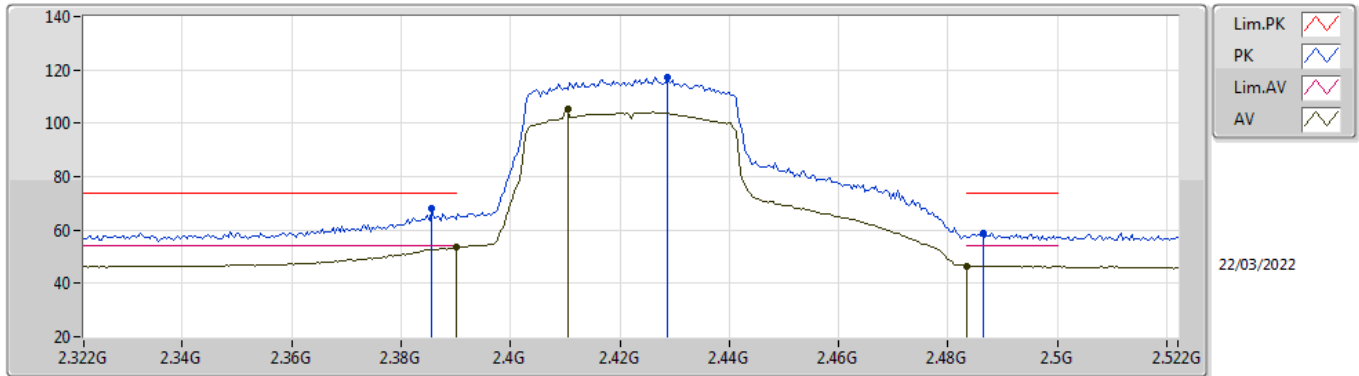


EUT Z_4TX
Setting 83
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92124G	44.79	74.00	-29.21	40.19	3	Horizontal	18	2.39	-	31.18	5.40	31.98
AV	4.9207G	31.88	54.00	-22.12	27.28	3	Horizontal	18	2.39	-	31.18	5.40	31.98

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

2422MHz_TX

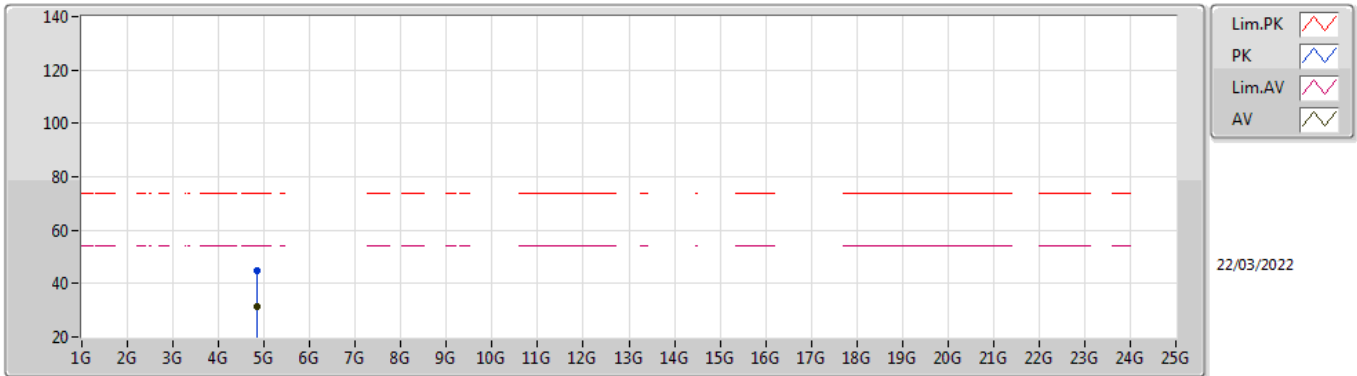


EUT_Z_4TX
Setting 70
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3856G	68.15	74.00	-5.85	36.75	3	Vertical	309.6	1.80	-	27.52	3.88	-
AV	2.39G	53.82	54.00	-0.18	22.45	3	Vertical	309.6	1.80	-	27.48	3.89	-
PK	2.4288G	117.40	Inf	-Inf	86.22	3	Vertical	309.6	1.80	-	27.28	3.90	-
AV	2.4104G	105.14	Inf	-Inf	73.88	3	Vertical	309.6	1.80	-	27.36	3.90	-
PK	2.4864G	58.62	74.00	-15.38	27.44	3	Vertical	309.6	1.80	-	27.27	3.91	-
AV	2.4835G	46.57	54.00	-7.43	15.39	3	Vertical	309.6	1.80	-	27.27	3.91	-

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

2422MHz_TX

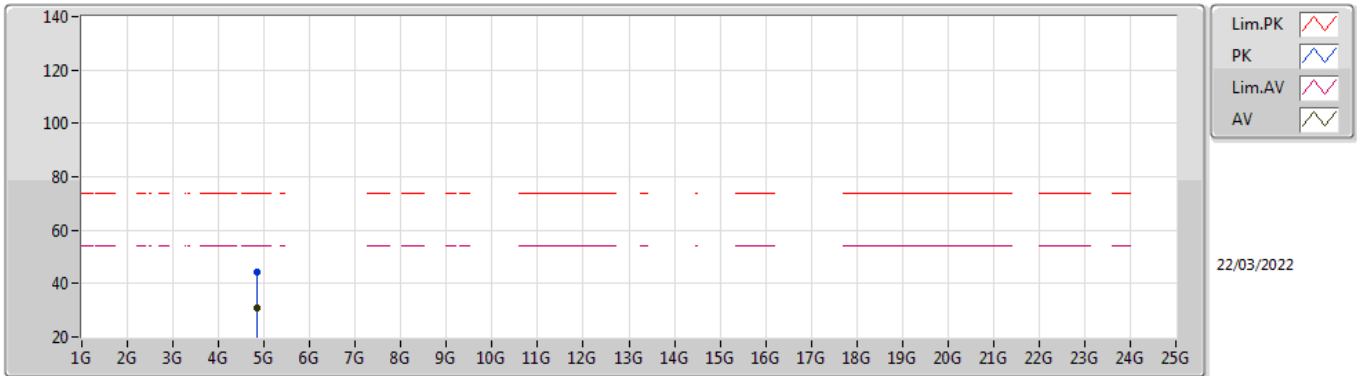


EUT_Z_4TX
Setting 70
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.84584G	44.92	74.00	-29.08	40.57	3	Vertical	96	2.55	-	31.01	5.38	32.04
AV	4.84062G	31.18	54.00	-22.82	26.83	3	Vertical	96	2.55	-	31.02	5.37	32.04

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

2422MHz_TX

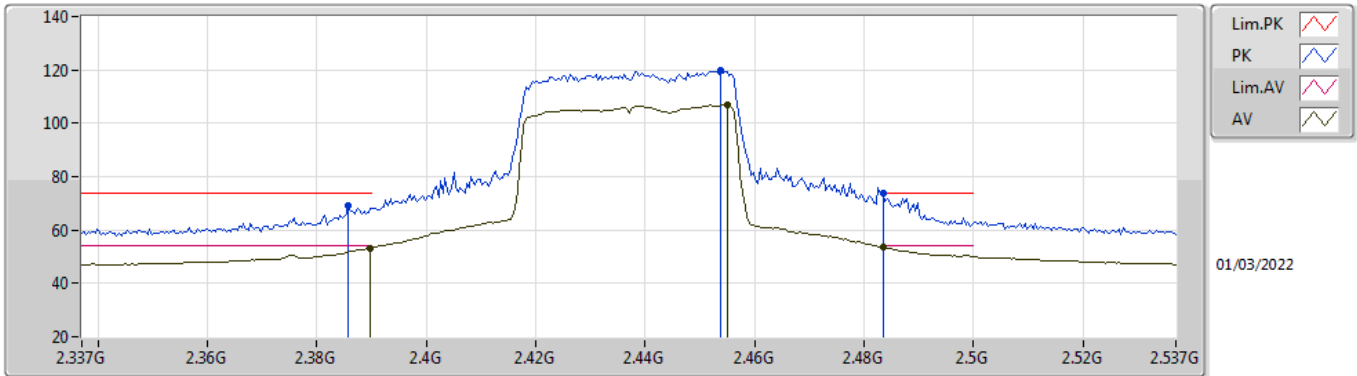


EUT_Z_4TX
Setting 70
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.84274G	44.56	74.00	-29.44	40.22	3	Horizontal	54	1.86	-	31.01	5.37	32.04
AV	4.84836G	31.08	54.00	-22.92	26.74	3	Horizontal	54	1.86	-	31.00	5.38	32.04

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

2437MHz_TX

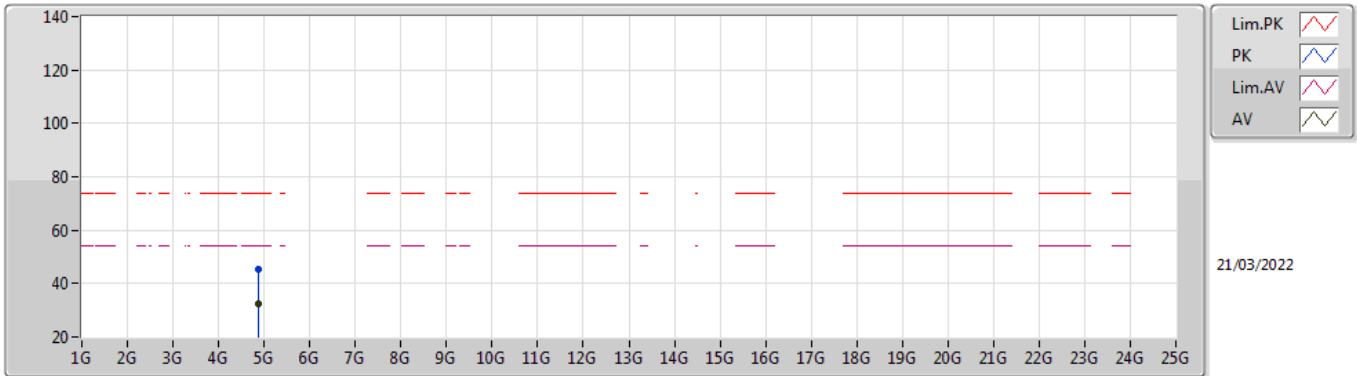


EUT_Z_4TX
Setting 81
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3858G	68.90	74.00	-5.10	37.51	3	Vertical	213.9	1.86	-	27.51	3.88	-
AV	2.3898G	53.33	54.00	-0.67	21.96	3	Vertical	213.9	1.86	-	27.48	3.89	-
PK	2.4538G	119.65	Inf	-Inf	88.53	3	Vertical	213.9	1.86	-	27.21	3.91	-
AV	2.455G	106.81	Inf	-Inf	75.69	3	Vertical	213.9	1.86	-	27.21	3.91	-
PK	2.4835G	73.75	74.00	-0.25	42.57	3	Vertical	213.9	1.86	-	27.27	3.91	-
AV	2.4835G	53.62	54.00	-0.38	22.44	3	Vertical	213.9	1.86	-	27.27	3.91	-

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

2437MHz_TX

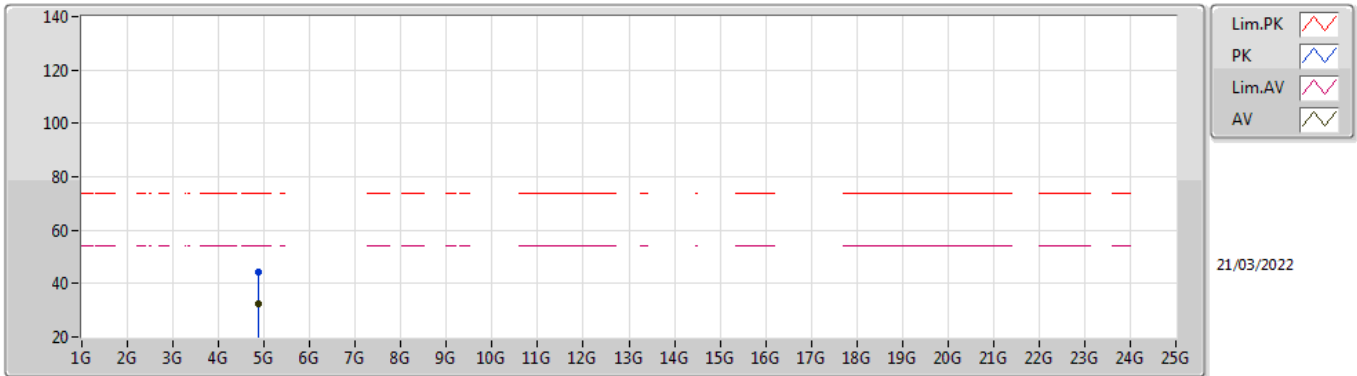


EUT_Z_4TX
Setting 81
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.8728G	45.37	74.00	-28.63	40.95	3	Vertical	289	2.34	-	31.05	5.39	32.02
AV	4.86448G	32.31	54.00	-21.69	27.92	3	Vertical	289	2.34	-	31.03	5.38	32.02

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

2437MHz_TX

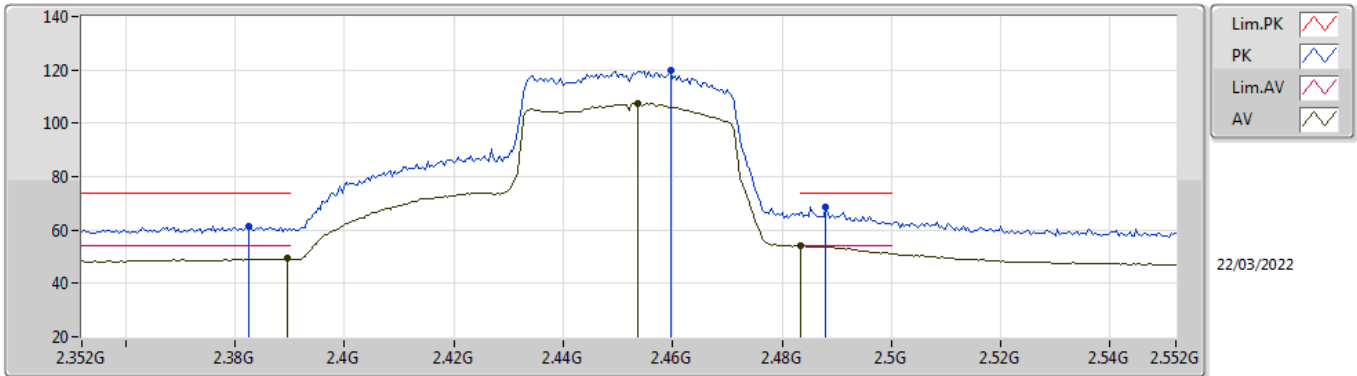


EUT Z_4TX
Setting 81
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87472G	44.27	74.00	-29.73	39.85	3	Horizontal	203	1.42	-	31.05	5.39	32.02
AV	4.86552G	32.32	54.00	-21.68	27.93	3	Horizontal	203	1.42	-	31.03	5.38	32.02

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

2452MHz_TX

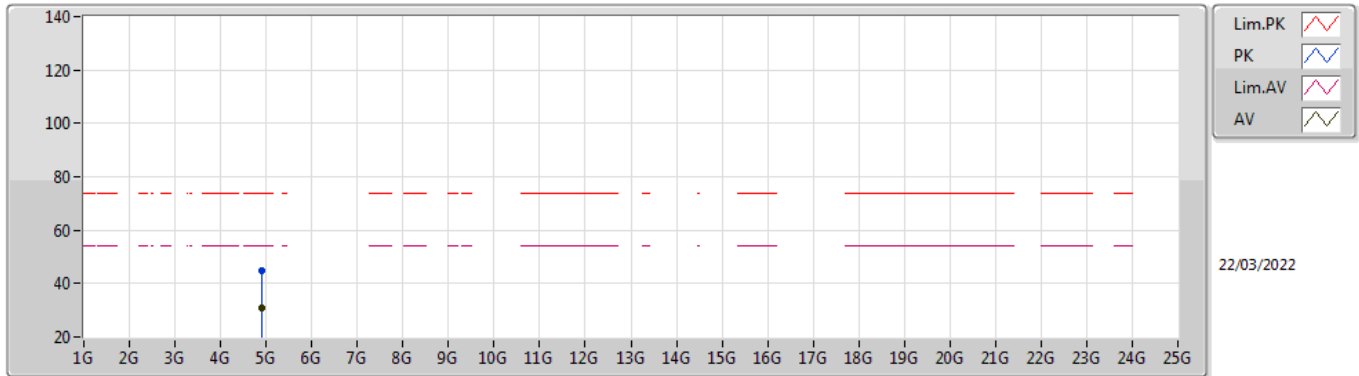


EUT_Z_4TX
Setting 81
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3824G	61.23	74.00	-12.77	29.81	3	Vertical	213.4	1.80	-	27.54	3.88	-
AV	2.3896G	49.31	54.00	-4.69	17.94	3	Vertical	213.4	1.80	-	27.48	3.89	-
PK	2.4596G	119.95	Inf	-Inf	88.82	3	Vertical	213.4	1.80	-	27.22	3.91	-
AV	2.4536G	107.38	Inf	-Inf	76.26	3	Vertical	213.4	1.80	-	27.21	3.91	-
PK	2.488G	68.58	74.00	-5.42	37.39	3	Vertical	213.4	1.80	-	27.28	3.91	-
AV	2.4835G	53.91	54.00	-0.09	22.73	3	Vertical	213.4	1.80	-	27.27	3.91	-

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

2452MHz_TX

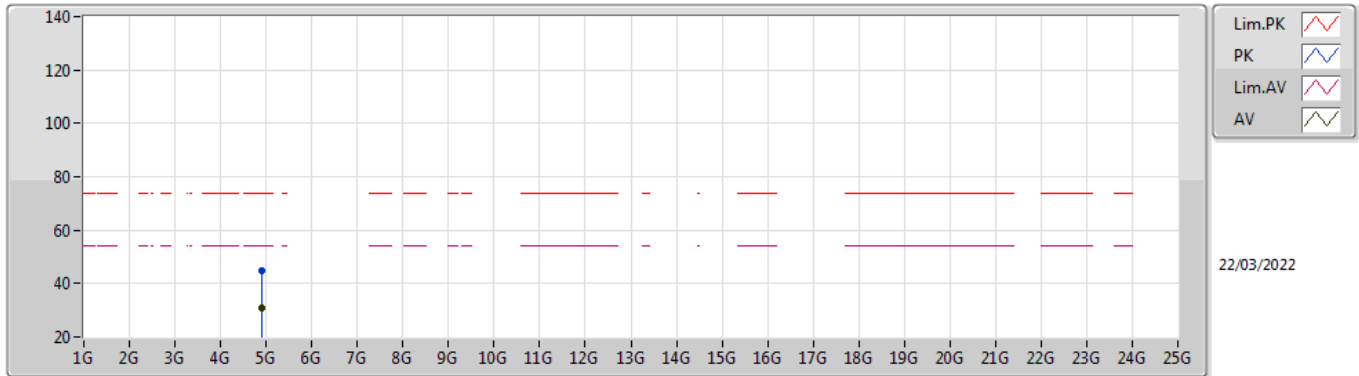


EUT_Z_4TX
Setting 81
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.90208G	44.80	74.00	-29.20	40.28	3	Vertical	86	2.06	-	31.11	5.40	31.99
AV	4.90702G	31.01	54.00	-22.99	26.47	3	Vertical	86	2.06	-	31.13	5.40	31.99

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

2452MHz_TX



EUT Z_4TX
Setting 81
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.90602G	44.65	74.00	-29.35	40.12	3	Horizontal	20	2.86	-	31.12	5.40	31.99
AV	4.90426G	30.96	54.00	-23.04	26.43	3	Horizontal	20	2.86	-	31.12	5.40	31.99

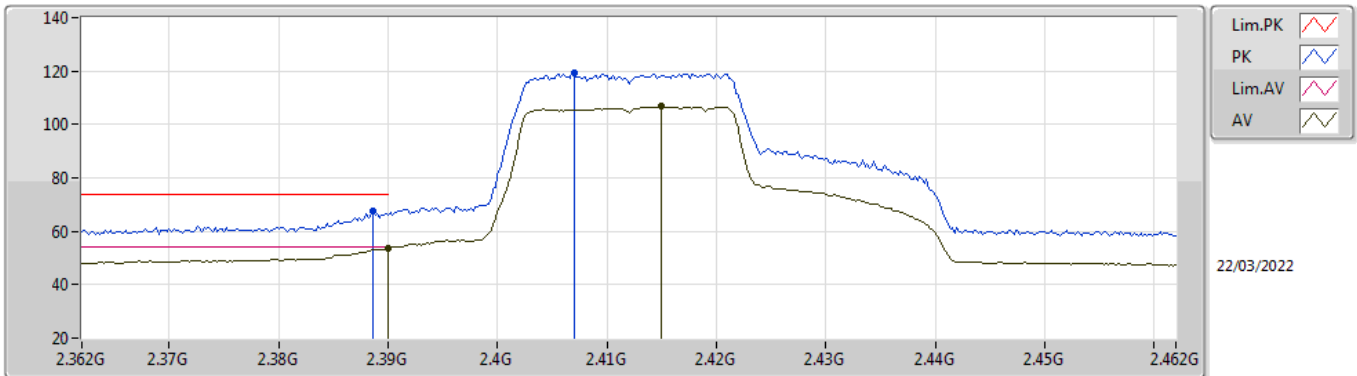


Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20-BF_Nss2.(MCS0)_4TX	Pass	AV	2.4835G	53.95	54.00	-0.05	3	Vertical	312	1.75	-

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

2412MHz_TX

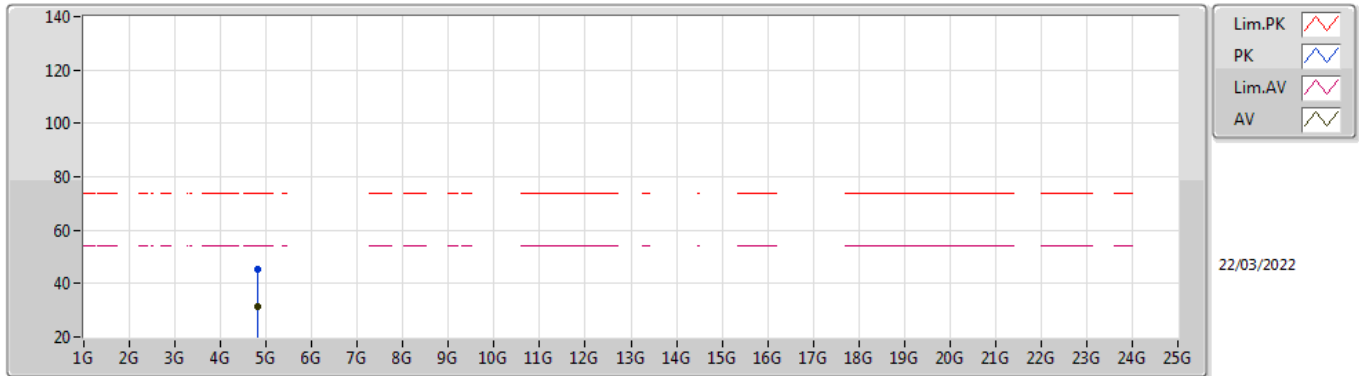


EUT_Z_4TX
Setting 77
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3886G	67.40	74.00	-6.60	36.02	3	Vertical	272.1	1.80	-	27.49	3.89	-
AV	2.39G	53.76	54.00	-0.24	22.39	3	Vertical	272.1	1.80	-	27.48	3.89	-
PK	2.407G	119.12	Inf	-Inf	87.85	3	Vertical	272.1	1.80	-	27.37	3.90	-
AV	2.415G	106.77	Inf	-Inf	75.53	3	Vertical	272.1	1.80	-	27.34	3.90	-

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

2412MHz_TX

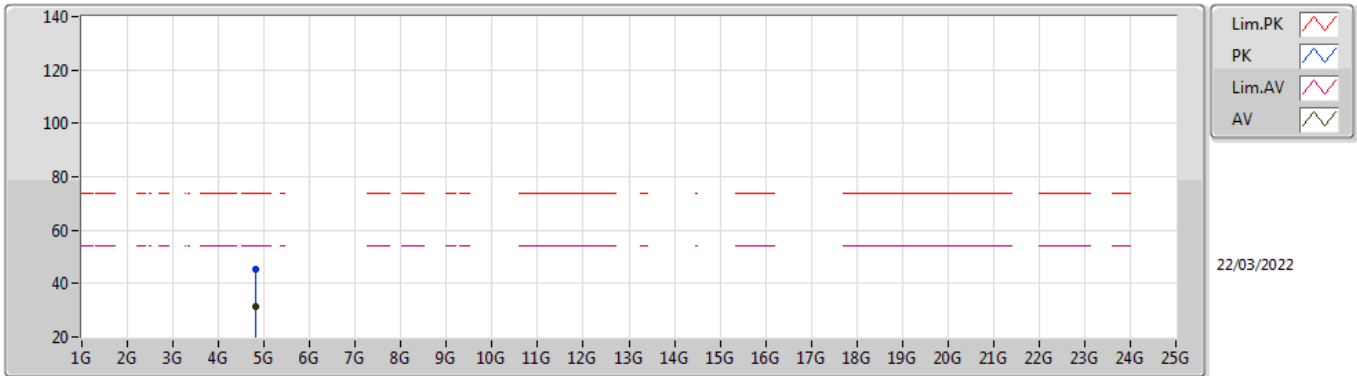


EUT Z_4TX
Setting 77
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82078G	45.37	74.00	-28.63	41.00	3	Vertical	50	2.35	-	31.06	5.37	32.06
AV	4.82842G	31.18	54.00	-22.82	26.82	3	Vertical	50	2.35	-	31.04	5.37	32.05

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

2412MHz_TX

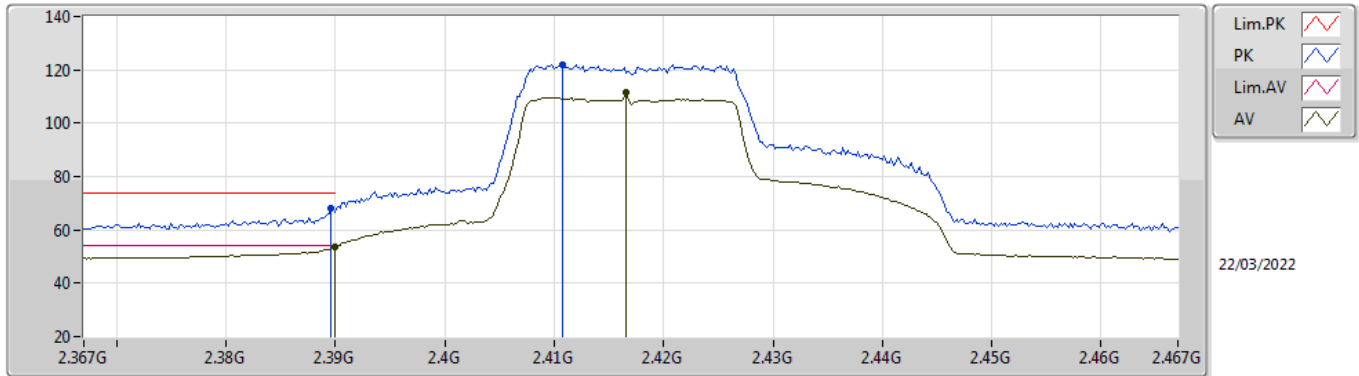


EUT_Z_4TX
Setting 77
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.825G	45.20	74.00	-28.80	40.84	3	Horizontal	308	2.17	-	31.05	5.37	32.06
AV	4.81912G	31.20	54.00	-22.80	26.83	3	Horizontal	308	2.17	-	31.06	5.37	32.06

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

2417MHz_TX

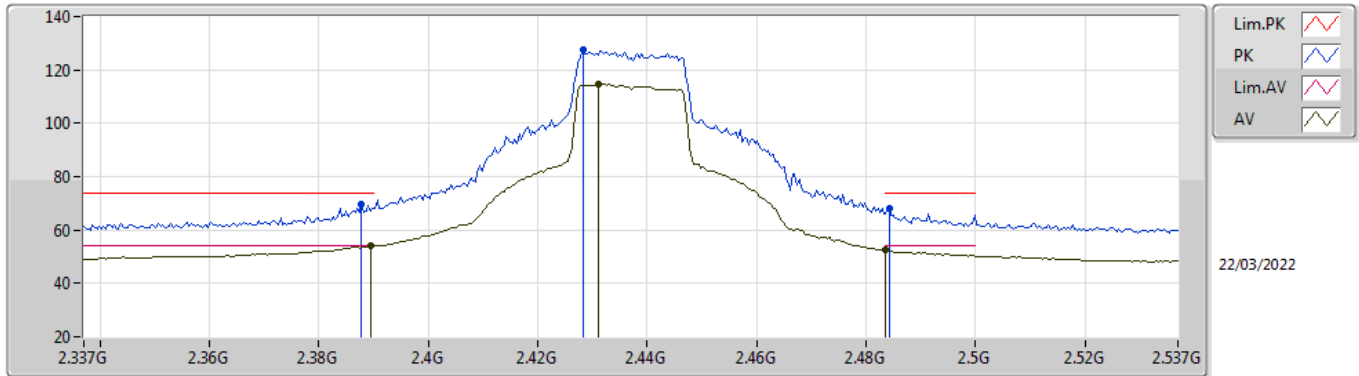


EUT Z_4TX
Setting 89
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3896G	67.98	74.00	-6.02	36.61	3	Vertical	248.2	1.80	-	27.48	3.89	-
AV	2.39G	53.80	54.00	-0.20	22.43	3	Vertical	248.2	1.80	-	27.48	3.89	-
PK	2.4108G	121.93	Inf	-Inf	90.67	3	Vertical	248.2	1.80	-	27.36	3.90	-
AV	2.4166G	111.41	Inf	-Inf	80.18	3	Vertical	248.2	1.80	-	27.33	3.90	-

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

2437MHz_TX

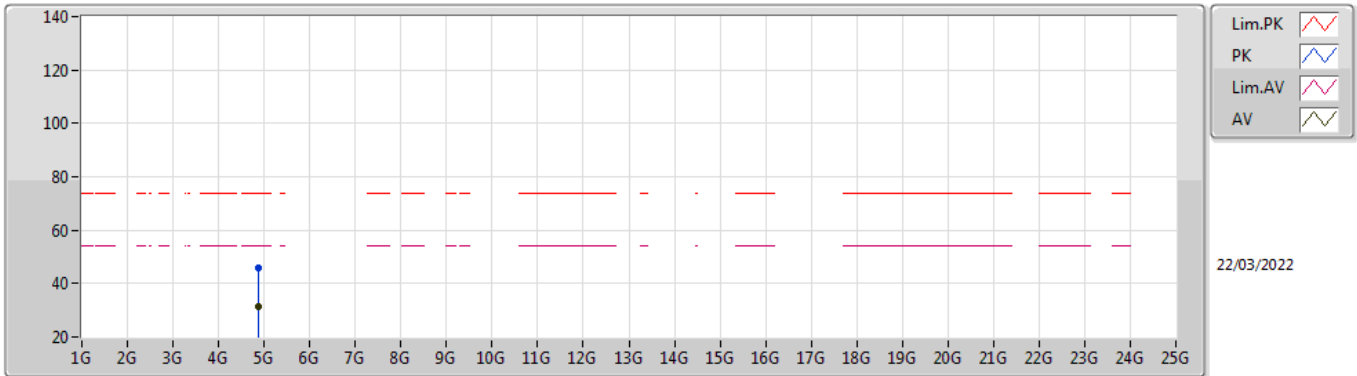


EUT_Z_4TX
Setting 100
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3878G	69.66	74.00	-4.34	38.27	3	Vertical	58.1	1.54	-	27.50	3.89	-
AV	2.3894G	53.91	54.00	-0.09	22.54	3	Vertical	58.1	1.54	-	27.48	3.89	-
PK	2.4282G	127.79	Inf	-Inf	96.60	3	Vertical	58.1	1.54	-	27.29	3.90	-
AV	2.431 G	114.50	Inf	-Inf	83.32	3	Vertical	58.1	1.54	-	27.28	3.90	-
PK	2.4842G	67.85	74.00	-6.15	36.67	3	Vertical	58.1	1.54	-	27.27	3.91	-
AV	2.4835G	52.38	54.00	-1.62	21.20	3	Vertical	58.1	1.54	-	27.27	3.91	-

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

2437MHz_TX

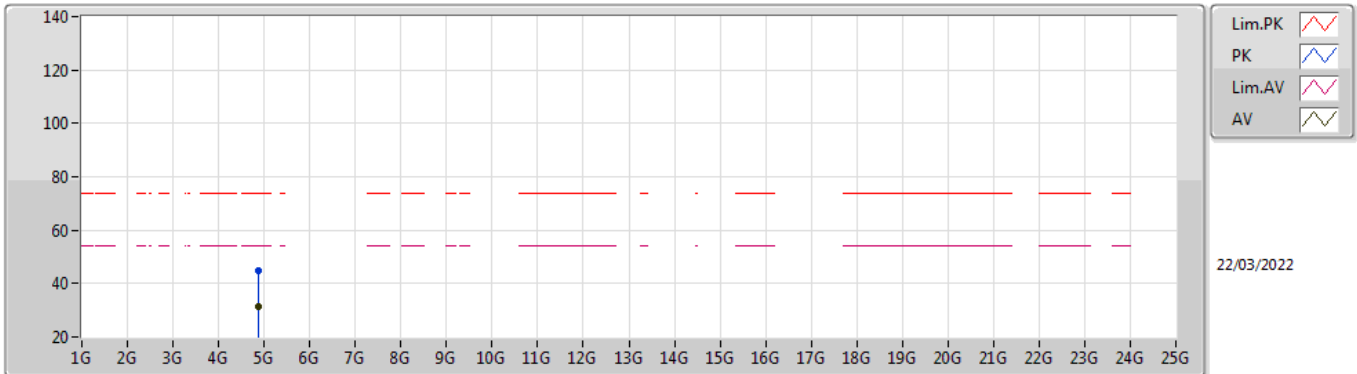


EUT Z_4TX
Setting 100
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87612G	45.79	74.00	-28.21	41.36	3	Vertical	203	2.86	-	31.05	5.39	32.01
AV	4.87238G	31.22	54.00	-22.78	26.81	3	Vertical	203	2.86	-	31.04	5.39	32.02

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

2437MHz_TX

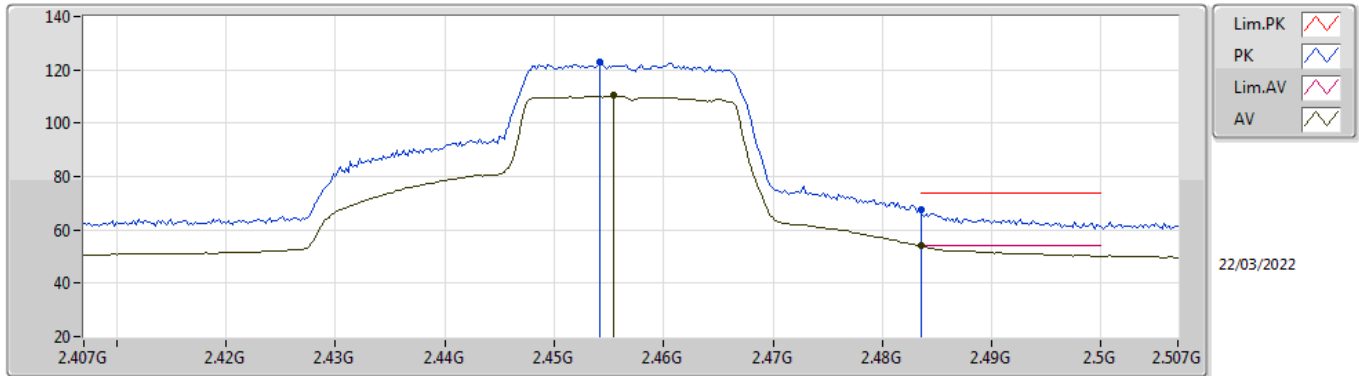


EUT Z_4TX
Setting 100
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.8763G	44.91	74.00	-29.09	40.48	3	Horizontal	159	1.30	-	31.05	5.39	32.01
AV	4.87354G	31.19	54.00	-22.81	26.77	3	Horizontal	159	1.30	-	31.05	5.39	32.02

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

2457MHz_TX

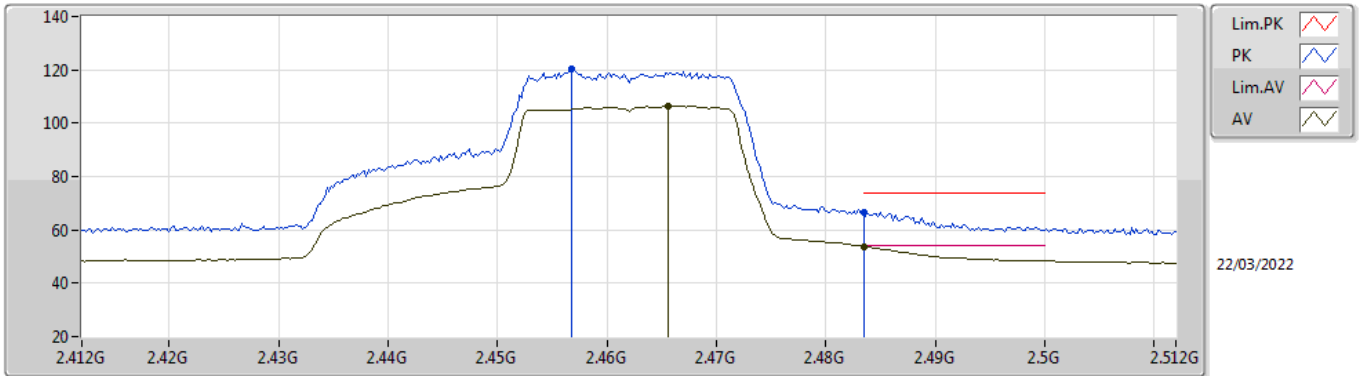


EUT_Z_4TX
Setting 92
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4542G	122.80	Inf	-Inf	91.68	3	Vertical	312	1.75	-	27.21	3.91	-
AV	2.4554G	110.27	Inf	-Inf	79.15	3	Vertical	312	1.75	-	27.21	3.91	-
PK	2.4835G	67.43	74.00	-6.57	36.25	3	Vertical	312	1.75	-	27.27	3.91	-
AV	2.4835G	53.95	54.00	-0.05	22.77	3	Vertical	312	1.75	-	27.27	3.91	-

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

2462MHz_TX

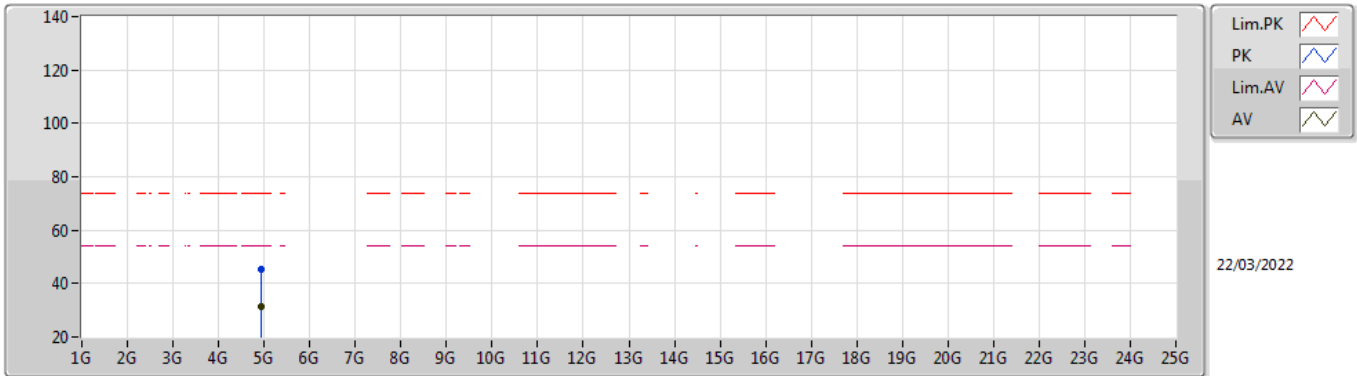


EUT_Z_4TX
Setting 78
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4568G	120.17	Inf	-Inf	89.05	3	Vertical	264.9	2.14	-	27.21	3.91	-
AV	2.4656G	106.44	Inf	-Inf	75.30	3	Vertical	264.9	2.14	-	27.23	3.91	-
PK	2.4835G	66.63	74.00	-7.37	35.45	3	Vertical	264.9	2.14	-	27.27	3.91	-
AV	2.4835G	53.78	54.00	-0.22	22.60	3	Vertical	264.9	2.14	-	27.27	3.91	-

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

2462MHz_TX

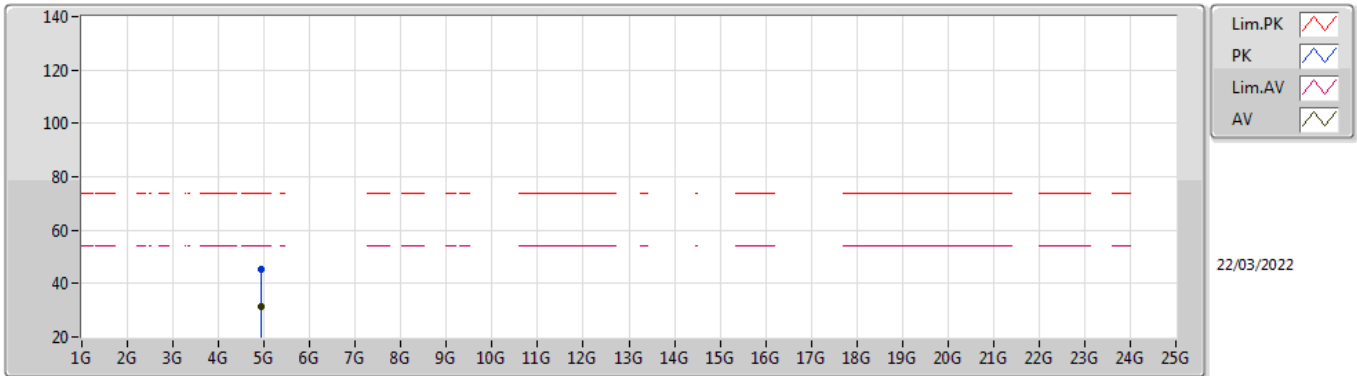


EUT Z_4TX
Setting 78
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92514G	45.59	74.00	-28.41	40.96	3	Vertical	201	2.69	-	31.20	5.40	31.97
AV	4.92408G	31.57	54.00	-22.43	26.94	3	Vertical	201	2.69	-	31.20	5.40	31.97

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

2462MHz_TX



EUT Z_4TX
Setting 78
06-F-S-5

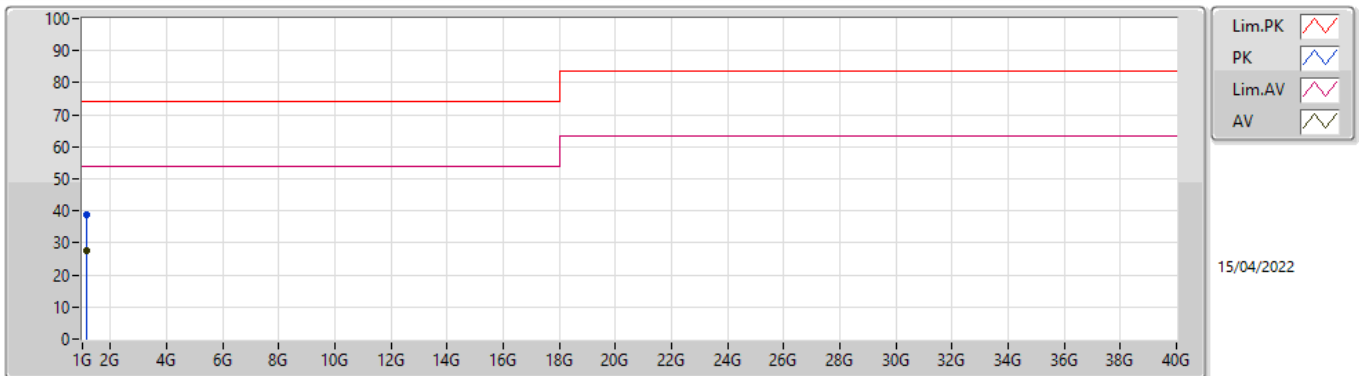
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92514G	45.40	74.00	-28.60	40.77	3	Horizontal	172	1.88	-	31.20	5.40	31.97
AV	4.92388G	31.52	54.00	-22.48	26.89	3	Horizontal	172	1.88	-	31.20	5.40	31.97



Summary

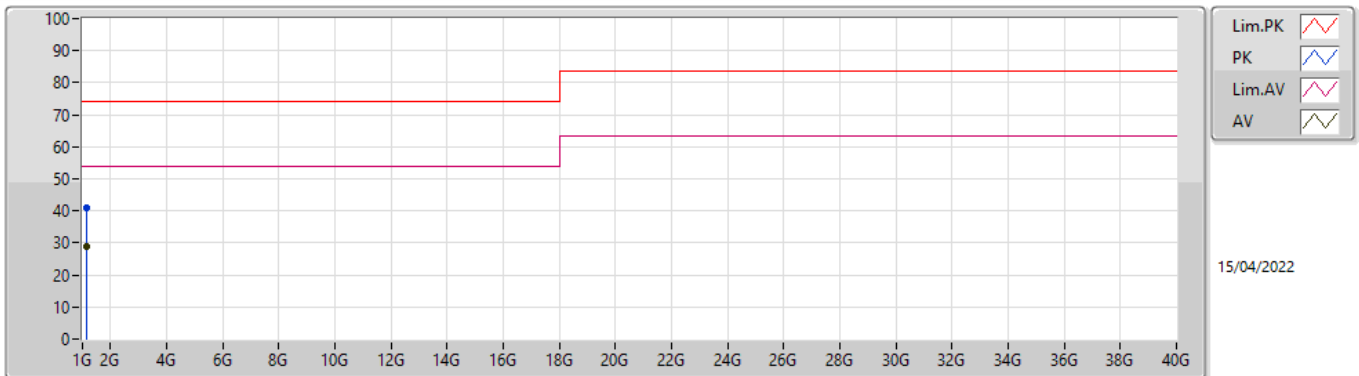
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	1.13561G	28.91	54.00	-25.09	Horizontal

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	1.13527G	38.62	74.00	-35.38	-9.08	3	Vertical	115	1.61	-	47.70	25.11	3.10	37.29
AV	1.13533G	27.51	54.00	-26.49	-9.08	3	Vertical	115	1.61	"Worst"	36.59	25.11	3.10	37.29

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	1.13588G	40.86	74.00	-33.14	-9.07	3	Horizontal	155	1.51	-	49.93	25.12	3.10	37.29
AV	1.13561G	28.91	54.00	-25.09	-9.08	3	Horizontal	155	1.51	"Worst"	37.99	25.11	3.10	37.29